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ABSTRACT

A project was conducted in Illinois to determine what basic skills were needed in vocational education and how they should be taught. A multiple methods approach incorporating interviews, observations, surveys, and document analysis was employed to obtain data from the literature, and from practitioners, administrators, and experts in the fields of basic skills and vocational education. In addition, a limited number of site visits to Chicago area vocational programs were conducted to gather data as well as to verify interpretations of data gathered throughout the project. The major culminating activity was a one-day conference to which experts were invited for the purpose of addressing issues related to the place and function of basic skills training in vocational programs. Information from the conference was used to formulate a long-range plan of action and investigation for determining the proper role of basic skills training in vocational education and to make policy recommendations to state staff for the conduct of this investigation. (Author/KC)

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ED212845

A COMPREHENSIVE STUDY OF THE RELATIONSHIP BETWEEN ACADEMIC REQUIREMENTS IN VOCATIONAL EDUCATION AND THE ABILITIES OF STUDENTS IN VARIOUS VOCATIONAL EDUCATION PROGRAMS

(FINAL REPORT)

Project Staff:

Albert Bennett
George Olson
Crag Orear

Research and Development Center
College of Education
Roosevelt University
Chicago, Illinois

July, 1981

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Illinois State Board of Education
Division of Adult, Vocational and Technical Education
Funding Agreement Number: R-31-11-D-0252-444

CE 031 361

A Comprehensive Study of the Relationship Between Academic Requirements in Vocational Education and the Abilities of Students in Various Vocational Education Programs

Project Staff

Albert Bennett
George Olson
Crag Orear

Research and Development Center
College of Education
Roosevelt University
Chicago, Illinois

Sponsored by

Illinois
State Board of
Education

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Donald G. Gill
State Superintendent of
Education

Department of
Adult,
Vocational and
Technical Education

Research and
Development Section

July, 1981

A Comprehensive Study of the Relationship Between Academic Requirements in Vocational Education and the Abilities of Students in Various Vocational Education Programs

(Final Report)

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Final Report Abstract Format

Title of Project: A Comprehensive Study of the Relationship Between Academic Requirements in Vocational Education and the Abilities of Students in Various Vocational Education Programs

Funding Agreement Number: R-31-11-D-0252-444

Principal Investigators:
Dr. George Olson, Director, Research and Development Center
Professors Albert Bennett and Crag Orear

Institution: College of Education, Roosevelt University

Location: 430 S. Michigan Avenue, Chicago, Illinois 60605

Time Period Covered: November 1, 1980 - July 31, 1981

Objectives of the Project:

1. To conduct a comprehensive literature review that addresses basic skills in vocational education programs.
2. To conduct a conference composed of experts in the field of basic skills in vocational education.
3. To work with DAVTE staff to develop recommendations for future policy and programs re basic skills in vocational education in Illinois.
4. To conduct a content analysis of the curricula requirements in vocational education school programs in Illinois to get information regarding current practices in vocational education.

Procedures: A multiple methods approach incorporating interview, observation, survey and document analysis was employed to obtain data from the literature, from practitioners, administrators and experts in the fields of basic skills and vocational education. In addition a limited number of site visits to Chicago area vocational programs were conducted to gather as well as verify interpretations of data gathered throughout the project. The major culminating activity was a one day conference to which experts were invited for the purpose of addressing issues related to the place and function of basic skills training in vocational programs. Information from the conference was utilized to formulate a long range plan of action and investigation for determining the proper role of basic skills training in vocational education and to make policy recommendations to state staff for the conduct of this investigation.

Expected Contribution or Potential Impact on Vocational Education: The study will provide systematic data and suggestions based on the data to approach the problem of basic skills in vocational education. Schools are expected to deliver to the labor market students with appropriate skills. It is necessary to assess current practices and make changes in schooling practice where necessary. Students entering vocational education programs are particularly affected by the lack of information about what does constitute basic skills for employment. Vocational education needs this information to better serve students in Illinois and the nation

Products Delivered: (Indicate titles, types, quantity, recipients and date of delivery)
Final Report,
Technical Report: Literature Review, Feb. 1981

Participants in Activity

Contributed Time

Project Director: George Olson
Director, Research and Development Center
Roosevelt University
College of Education
430 S. Michigan
Chicago, Illinois 60605

Dr. George Olson, Director of the Research and Development Center, Assistant Professor of Education. Professor Olson has an extensive background in research and instrument development. He has served as an evaluation consultant for several major projects. As an evaluator for the DAVTE project "Developing a Plan to Achieve Sex Equity in Vocational Education" he published and presented a paper on "Local Evaluation for Sex Equitt" designed to assist school practitioners in evaluating the status of sex equity in their schools and assessing progress toward sex equity. For three years Dr. Olson directed the Right to Read Evaluation Program in Illinois. He has also been an evaluator for Title I and Teacher Corps Programs. In his role as Curriculum Specialist and Human Relations Consultant to the Teacher Corps Project he has conducted extensive in-class consultation with classroom teachers to improve implementation of the continuous progress evaluation model. He has also conducted and disseminated evaluations of each component of the Teacher Corps Project. His dissertation work was in the area of school desegregation. Dr. Olson has organized a variety of curriculum development, evaluation, and training activities and is a skilled computer analyst. His research also includes several studies of Stress and the School Administrator and the Teacher Stress Inventory.

Paid Participants

Program Development Specialist: Albert Bennett
Research Associate
Roosevelt University
College of Education
Research and Development Center
430 S. Michigan
Chicago, Illinois 60605

Professor Albert Bennett has teaching and administrative experience in a number of different areas (reading, counseling, research and statistical methods), and will receive his Ph.D. in Educational Administration in Spring, 1982 from the University of Chicago. He has been director of the Test Administration Center of Malcolm X College for the past two years and thus has wide knowledge concerning testing, criteria for assessment of curricula, and experience in program planning. At present Professor Bennett is doing ethnographic research as part of a Teacher Stress Project in Chicago and New York schools funded by the National Institute of Education. The combination of administrative expertise, planning skills, knowledge of testing and program requirements, and practical experience with classroom research make him uniquely qualified to carry out the tasks of this project.

Field Supervisor: Crag Orear
Professor
Roosevelt University
College of Education
430 S. Michigan
Chicago, Illinois 60605

Professor Crag Orear is the Supervisor of the Secondary Education Teacher Education Program at Roosevelt University. For more than 15 years, Professor Orear has taught the general backgrounds course in secondary education for all students. He has supervised observations in schools, arranged placements for pre-student teaching clinical experiences and supervised student teaching in secondary schools all over the Chicago Metropolitan Area. He has functioned as

a consultant to a variety of secondary schools, served on North Central Accreditation Teams in the evaluation of vocational education programs and general education programs. He has recently completed a year of work in the education of the secondary school handicapped students and written an article concerning the special needs of handicapped high school students. He is a skilled interviewer and knows his way around high schools.

Consultant to the Project: Janice Weiss
816 S. Taylor Street
Oak Park, Illinois

Curriculum Vita

Janice Weiss
816 S. Taylor
Oak Park, Illinois 60304
(312) 386-7674

married, one child
excellent health

Education

Harvard University Graduate School of Education
Ed.D. 1978 in History of Education and Education and Social Policy
Ed.M. 1972

University of Michigan
B.A. 1964 in English

Professional experience

Research consultant, Designs for Change, 220 S. State St., Chicago, Illinois (August 1979 - May 1980)
DFC is a non-profit research and consulting organization concerned with improving urban schools. I carried out research and prepared reports for DFC on the origins, development, and implementation of several recent mandates affecting primary and secondary schools, including bilingual education, compensatory education, Education of All Handicapped Children Act, and Title IX.

Lecturer in philosophy of education and urban school policy, University of Illinois-Chicago Circle (September 1978-June 1980

Lecturer in history of education in the United States, Indiana University-South Bend, summer 1978, and Michigan State University-Southwest (Benton Harbor), spring 197

Teaching assistant in statistics, Harvard University Graduate School of Education (September 1972 - January 1974)

Research assistant to Professor Samuel Bowles, Department of Economics, Harvard University (September 1969-September 1971)
I carried out research, data collection, and analysis for a study of educational development in the U.S. South before and after the Civil War; surveyed literature, collected and computed data, and assisted in preparing and editing several papers in the economics of education.

Other work experience

Area supervisor and counselor, American Field Service International Scholarships, 313 E. 43rd, New York, N.Y. (March 1967 - August 1969)
I selected foreign exchange students and American host families, placed students with families, and counseled students, families, and local AFS volunteers.

Editorial assistant, The Viking Press, 625 Madison, New York, N.Y. (March 1965 - February 1967)

Publications

"Educating for Clerical Work: The Nineteenth-Century Private Commercial School in the United States," Journal of Social History, March 1981 (in press)

"A Review of Richard A. Weatherley's Reforming Special Education: Implementation from State Level to Street Level," Harvard Educational Review, Fall 1980

"Goals of the Women's Movement: A Clarification" (with Elizabeth Katz), in Richard C. Edwards, M. Reich, and T. Weisskopf, The Capitalist System (Prentice-Hall, 1972)

References

Prof. Samuel Bowles, Dept. of Economics, University of Massachusetts, Amherst, Massachusetts

Prof. Marvin Lazerson, School of Education, University of British Columbia, Vancouver, Canada

Dr. Donald R. Moore, Designs for Change, 220 S. State, Chicago, Illinois

Prof. David Tyack, School of Education, Stanford University, Stanford, California

Prof. Donald Warren, School of Education, University of Maryland, College Park, Maryland

Illinois State Board of Education

Department of Adult, Vocational and Technical Education
Research and Development Section

Product Abstract

1. Title of material: A Comprehensive Study of the Relationship Between Academic Requirements in Vocational Education and the Ability of Students in Various Vocational Education Programs
2. Date material was completed: July, 1981
3. Please check one: New material X Revised material ____
4. Originating agency: Roosevelt University, College of Education
   Address: 430 S. Michigan Ave., Chicago, Illinois Zip Code: 60605
5. Name(s) of developer(s): Albert Bennett, George Olson, Crag Orear
   Address: 430 S. Michigan Ave., Chicago, Illinois Zip Code: 60605
6. Developed pursuant to Contract Number: R-31-11-D-0252-444
7. Subject Matter (Check only one according to USOE Code):

   USOE Code

   ____ 01 Agricultural Education
   ____ 03 Business and Office Education
   ____ 04 Distributive Education
   ____ 07 Health Occupations Education
   ____ 09 Home Economics Education
   ____ 10 Industrial Art Education
   ____ 16 Technical Education
   ____ 17 Trade and Industrial Education
   ____ 22 Cooperative Education
   ____ Career Education
   ____ Other (Specify) ____

8. Education Level:

   ____ Pre-K Thru 6 ____ 7-8 ____ 9-10 ____ 11-12
   ____ Post-Secondary ____ Adult X Teacher (Pre-service)
   ____ Administrator (Pre-Service) X Other (Specify) In-service

9. Intended for Use By:

   ____ Student X Classroom Teacher X Local Administrator
   X Teacher Educator X Guidance Staff X State Personnel
   ____ Other (Specify) ____

10. Student Type:

    X Regular ____ Disadvantaged ____ Handicapped
    ____ Limited English Proficiency ____ Other (Specify) ____

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Address 430 S. Michigan Ave., Chicago, Illinois Zip Code 60605

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15. Are Consultive/Training Services Available? Yes_____ No. X

Contact: Illinois State Board of Education
Department of Adult, Vocational and Technical Education
Research and Development Section, E-426
100 North First Street
Springfield, IL 62777
(217) 782-4620

16. General Description (State the general objective and suggested method of use. Summarize the content and tell how it is organized. Continue on back of this sheet or on another sheet, if necessary.):

17. Person Completing this Abstract: Albert Bennett

Full Address:

Roosevelt University, College of Education, Research & Development

430 S. Michigan Avenue

Chicago, Illinois Zip 60605

Conference Summary

(1)

The purpose of the one day (9:00 AM-4:00PM) conference held May 14, 1981 at Roosevelt University in Chicago was to further define and articulate the issues concerning basic skills training in vocational education and to generate policy recommendations that could be given to the Illinois State Board of Education for consideration. Eleven experts in the field across a number of role groups (administrators, practitioners, higher education, etc.) were invited to the conference. Each participant was requested to respond in writing to a set of four questions, the last of which pertained directly to his or her role group reference.

After the conference a content analysis of their responses was conducted and a number of similarities were found. There was general agreement about the need for competency based instruction and the need to individualize instruction. However, there was no consensus about the method that should be used to attempt to remediate vocational education students' deficiencies in basic skills.

The responses of the seminar participants strongly expressed the need for a continuous method of evaluating student performance. The instructional method most often mentioned as having the greatest potential for achieving this end was competence based instruction.

(2)

Included below are the correspondence and materials used to promote, organize and implement the seminar.

Roosevelt University

Memorandum

Date March 30, 1981

To John Washburn and James Haire

From George Olson and Albert Bennett

Subject Basic Skills Seminar

During the meeting of March 18th, the feasibility of conducting a seminar that addressed the issue of basic skills in vocational education was discussed. In response to that discussion, we have generated a tentative seminar format and agenda which are enclosed. Also enclosed please find a proposed pre-seminar plan, a proposed budget revision, and a proposed post-seminar reaction sheet. These documents are all tentative and are, as such, a beginning. We look forward to discussing any additional thoughts, ideas, and considerations you may have on April 6.

As you will see in the documents enclosed, we have proposed that ten (10) individuals be invited to Roosevelt for a one day seminar beginning at 9 AM and concluding at approximately 4 PM. The proposed honorarium for each seminar participant will be $150.00. This sum includes pre-seminar preparation. In line with our discussion on the 18th, the individuals selected will either be experts in the field of basic skills in vocational education or/and individuals who have a keen interest in exploring the place of basic skills in vocational education. Ideally those selected participants will represent each of the role groups that we discussed as being relevant to the broad issue of basic skills in vocational education.

Al Bennett, Gayle Mindes, and I will be in Springfield April 6th for a Sex Equity meeting that begins at 1:30 PM. Perhaps Al and I could meet with you over lunch or later in the afternoon to discuss plans for the seminar. I will call in the next few days to confirm a time. Please do not hesitate to call if there are any questions.

George Olson

Explanation of Agenda: Organization of the Day

The enclosed agenda is tentative, of course, and subject to change. In coming up with activities for the day, we attempted to put ourselves in the place of the participants with the intention of proposing activities that would be a reasonable outgrowth of what they had prepared for the seminar and what information we want out of it. The specific information discussed will, of course, depend upon the questions we ask them. Essentially, however, we want them to respond to the problem of how to treat basic skills in vocational education and then to respond specifically to their particular role. Consequently, the 10:00 - 12:00 morning session should give the participants an opportunity to present their general and specific thoughts on the problem. "Defining the dimensions of the problem" refers to this sharing and discussion. If the group has time, they should then consider which concerns are most important. For example, if the employers' representative felt that a key first step would be to establish better communications between vocational educators and potential employers, and the rest of the group agreed, then this would have no. 1 priority. The small groups should actually attempt to rank the activities they suggest in order of importance and in terms of required sequence.

Careful notes are to be taken by a staff member, and one other staff member is to orchestrate the discussion. We anticipate three groups, each with three or four outside consultants and two staff persons.

During lunch, Al and I can take some time to summarize briefly the groups' remarks in order to present a summary to the whole group at the beginning of the afternoon session. The afternoon session will be spent in small groups also, but groups will attempt to develop recommendations for how to address the entire problem, considering the work of all groups. What should be the policies of the state office with respect to basic skills in vocational education? What are the goals statewide, and how should they be satisfied? They would grapple with some

of the problems we were discussing such as the problems of giving inservice, incentive systems, best approaches to dealing with the basic skills problems, etc. Again, this would have to be structured by the group leaders with a specific product submitted from each group.

The wrap-up would involve participants' reactions to the seminar and any final questions or comments they would have.

This is our thinking to this point. We need to generate the questions they will be asked to respond to before they come to the conference if we decide to follow this plan. Perhaps we can generate these questions on April 6th at our meeting. We will come prepared with some suggestions.

If we go with one day only, which given finances and time constraints is the most feasible, mid May may be a good time. This would give us May and June to write up results and do any follow-up that might be needed.

Tentative AGENDA

Middle to Late May, 1981

9:00 - 9:30 AM	Coffee and Rolls
9:30 AM	Welcoming Remarks: John Washburn, Henrietta Schwartz
	A. Introductions
	B. Purpose, reiteration of problems and current Status of Basic Skills in Vocational Education, and charge to the group.
	C. Overview the day, field questions of clarification.
10:00 - 12:00PM	Small Group Work - Four groups (Facilitator and Recorder and participants)
	A. Define dimensions of the problem
	B. Prioritize the concerns on the basis of importance and necessary sequence of activities.
12:00 - 1:30 PM	Lunch: Buffet and Break
1:30 - 2:00 PM	Summarize Results of Morning: Assign group tasks
2:00 - 4:00 PM	Suggestions to Method - How can the needs be satisfied: Produce recommendations to the DAVTE state administrators. (Methods, Feasibility, Policy)
4:00 - 4:30 PM	Wrap-up
	PMRS
	Final Thoughts

Proposed Budget:

Basic Skills in Vocational Education Seminar

I.	Travel Costs for 10 participants $100/participant	$ 1,000
II.	Honoraria for 10 participants $150/day + pre-seminar work	1,500
III.	Materials Costs: Pre-Seminar package, Seminar preparation and mailing costs $5/participant and staff	200
IV.	Lunch for participants, coffee+ during the day $10/participant	200
V.	Miscellaneous Expenses	100
	Total	$ 3,000

Roosevelt University

Memorandum

Date March 30, 1981

To John Washburn and James Haire

From George Olson and Albert Bennett

Subject Vocational Education Seminar Budget

The needed $3,000 for the proposed seminar can be covered out of two line items in our present budget:

$2,100 from line II.1., Consultants & Contractual Services, and

$ 900 from line IV.1., Project Staff and Consultants.

Roosevelt will provide the room and arrangements for lunch, coffee, etc. Once the budget is decided, our controller will need a letter approving the costs as indicated.

If additional costs beyond the $3,000 are needed, they will have to come from somewhere beyond the Roosevelt budget for this project. This $3,000 will deplete nearly all but salary costs. These amounts seem reasonable in our opinion with the possible exception of the honoraria. Is it enough for one day's work plus some pre-conference reading and writing?

Please contact us with any reactions.

(3)

The names of the individuals who participated in the Basic Skills in Vocational Education Conference are listed below:

Rupert Evans
Project Director
University of Illinois

Pete Johnson
Executive Director, Advisory Council
Illinois State Board of Education

Ron Stadt
Project Director, Vocational Education Studies
Southern Illinois University

Phil Viso
Assistant Superintendent
Department of Vocational and Career Education Program Development
Chicago Board of Education

Jim Naylor
Assistant to the Superintendent
Lockport Township High School

Robert Rose
Dean of Instruction
Richland Community College

Robert Rubinow
Assistant Superintendent
Rich Township

Wayne Sampson
Director of Public Affairs
Illinois Central College

Michael Crowe
Research Specialist
National Center for Research in Vocational Education
The Ohio State University

Dick Miguel
Research Specialist
National Center for Research in Vocational Education
The Ohio State University

William Overocker
Education Center
Fort Sheridan

Evaluation Instrument and Results

(4,5)

At the end of the workshop a Post Meeting Reaction Sheet was distributed to all participants. (Please find copy of PMRS in Appendix B.) The responses were summarized in terms of percentages of responses to the various categories included on the instrument. Twelve participants (100%) responded with the following results. Ninety-two percent (11) responded that the seminar was "very interesting" while eight percent (1) indicated only "somewhat interesting." In terms of providing an opportunity to share knowledge and insights, 83% (10) indicated "very successful" while 17% (2) indicated only "somewhat successful."

Twenty-five percent (3) responded that the small groups successfully completed their tasks while 67% (8) indicated that they were only "somewhat successful." One person indicated "not too successful."

Respondents were then asked to comment on the clarity, appropriateness, and extent of accomplishment of the seminar objectives. On a four point scale the average response for the group on clarity of objectives was 3.4, for appropriateness was 3.6 and for accomplishment was 2.9. In terms of format of the seminar, again on a 4 point scale, the group showed an average of 3.5.

Participants were then asked to check off the strenght or weakness of the following factors: relevance of content, interest of sessions, applicability, interaction with other participants and opportunity for use of your expertise. No persons cited relevance as a weakness, and for each of the other categories one participant checked the weakness column.

Participants were also asked for suggestions for improvement and general comments. Most were brief and constructive. The overwhelming "complaint" was lack of sufficient time to fully address all issues and complete tasks fully. These were found in the context of justifying low ratings given to task completion (question 3), accomplishment of seminar objectives (question 4) and suggestions for improvement (question 7). Nearly all other comments were favorable, commending the efforts of all involved. Often praised was the requirement that experts react to materials prior to the seminar.

In general these can be interpreted as quite favorable to the seminar generally, and these corroborate the very positive reactions given by the Roosevelt Project staff. In all, this proved to be a stimulating and worthwhile vehicle for gathering information on pressing issues as well as putting informed minds to work on the development of reasonable and useful solutions to them.

BASIC SKILLS IN VOCATIONAL EDUCATION:
A WORKING SEMINAR
APRIL, 1981

ROOSEVELT UNIVERSITY

Post Seminar Reactions

1. How interesting was the seminar to you?

		1 (8%)	11 (92%)
Not interesting at all	Not too interesting	Somewhat interesting	Very interesting

Comments: _____

2. How effective was the seminar in providing an opportunity for you to share your knowledge and insights on Basic Skills in Vocational Education?

		2 (17%)	10 (83%)
Not at all successful	Not too successful	Somewhat successful	Very successful

Comments: _____

3. How successful was your small group in completing assigned tasks?

	1 (8%)	8 (67%)	3 (25%)
Not at all successful	Not too successful	Somewhat successful	Very successful

Comments: _____

4. Objectives for the seminar:

	1	2	3	4		
Unclear			10% / 1	45% / 5	45% / 5	Clear 3.4
Inappropriate				36% / 4	64% / 7	Appropriate 3.6
Not accomplished		18% / 2	73% / 8	9% / 1		Accomplished 2.9

Comments: _____

5. Format of the seminar:

			9%	27%	64%		
Inappropriate	/	/	1	/ 3	/ 7	Appropriate	3.5
	1	2	3		4		

Comments: _____

_____

6. Check any of the following which you consider to have been strengths or weaknesses of the seminar:

	Strength	Weakness
a) Relevance of content	11 (100%)	0 (0%)
b) Interest of sessions	10 (91%)	1 (9%)
c) Applicability	8 (89%)	1 (11%)
d) Interaction with other participants	9 (90%)	1 (10%)
e) Opportunity for use of your expertise	9 (90%)	1 (10%)

7. What suggestions would you make for improving the seminar?

_____

_____

8. Other Comments: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

(6)

The primary failure or shortcoming of the Basic Skills in Vocational Education Conference that was pointed out by both Conference and Project Staff participants was the amount of time available. It was agreed that for a problem as complex as the one undertaken, at least two days and preferably more would have been more productive. This constraint, however, was due primarily to fiscal considerations in that the Project budget would not allow for more time.

The procedure of contracting a half-day in order to allow time for written responses to a series of questions from Conference participants was excellent and would be continued in other conferences that would be held. Also, having participants meet in small groups to produce a set of recommendations that would be shared during the afternoon session was also quite successful.

(7)

Included below is a sample copy of the correspondence and pre-seminar questions sent to the 11 participants. Included also are their written responses to these questions.

Roosevelt University
430 South Michigan Avenue
Chicago, Illinois 60605

College of Education

Sample of Correspondence sent to Seminar Participants.

April 14, 1981

Mr. Jerome Gudauskas
Director, Lake City
Vocational Center
19525 W. Washington
Grays Lake, IL 60036

Dear Mr. Gudauskas:

Roosevelt University is presently working with Illinois Department of Adult, Vocational and Technical Education staff of the Illinois State Board of Education to obtain a current status report of the extent to which Basic Skills training has been incorporated as a part of Vocational Education programs in Illinois. The major results of this study will be recommendations for policy decisions concerning how the state will address the problems, issues and needs of basic skills training as well as the proper place of basic skills training in vocational education programs.

In recent meetings with John Washburn and James Haire plans were developed for a one day Basic Skills Seminar at which 10 experts in the field of vocational education from a variety of roles would attend and provide relevant information and advice concerning Basic Skills. You have been recommended by John Washburn as an expert in the field, one who could provide valuable input to this process, and we are making preliminary calls prior to sending out formal letters and packets to find out if you would be willing to participate. The Seminar will be held on May 14 (Thursday) from 9:00 AM to 4:30 PM at Roosevelt University in Chicago. Each participant will receive an honorarium of $150 which translates as one and one half days consultant work at I.S.B.E. rates. Meals and travel expenses will also be reimbursed. The Seminar will be conducted jointly by the DAVTE and Roosevelt Staff.

The activities will be both large and small group work with ample opportunity for sharing of information and discussion of the varying points of views of the participants. The end products will be a data base of relevant information concerning the status and future of basic skills training as it relates to vocational education as well as a tentative list of recommendations for policy concerning how the state could best serve its constituents in this area. We feel that there is a great need at this time to address the problems and issues surrounding the treatment of Basic Skills training in Vocational Education, a concern that is reflected nationally. This seminar is timely and can have great significance in determining future improvements in Vocational Education programs statewide.

Page Two

If you can participate, please call (312) 341-3868 and we will send a formal letter with an agenda of the program giving the particulars of the seminar, and approximately one week following the letter, you will be sent a copy of the recent literature review concerning basic skills in vocational education just completed by the Roosevelt University staff with some pre-seminar questions related to your views and the special role you hold.

Sincerely,

George Olson, Director
Research and Development
Center

Please find below the list of questions referred to in the accompanying letter. Please set aside some time before the Seminar to respond to these questions in writing. Also, we have taken the liberty of including an optional question. As you know, one of the major outcomes of this Seminar will be a set of policy recommendations for the State Office. While these recommendations will be formulated at the Seminar, it will facilitate discussion of potential recommendations if you can provide us with any recommendations that you wish to propose now. Please jot down any thoughts you may have and would like to share with the other Seminar participants.

1. There are certain assumptions associated with vocational education. One of the more prevalent maintains that training in basic skills will enhance one's opportunities in three ways; (1) in completing a vocational education program, (2) in advancing in the work place and (3) in being retrained and therefore retained during times of economic retrenchment. In your experience what has been the validity of this assumption? If any part of this assumption is invalid, what could be done to increase its validity?

2. The question of how to introduce basic skills training into vocational education has been asked often. Various intervention strategies have been identified. These strategies range from having a reading specialist solely responsible for the remediation of basic skills deficiencies to having the vocational education teacher attempt to remediate these skill deficiencies in the classroom. Please comment on the likely effectiveness of each of these strategies as well as other intervention strategies with which you are aware.

3. Each of you has a specific role in vocational education. Given the specific and possibly unique aspect of your role, what do you believe should be done to solve or deal with the basic skills "problems" that vocational education faces?

4. In your role as a national expert on basic skills in vocational education you undoubtedly have invaluable information. Please identify any model programs that address basic skills in vocational education. Also, please provide a brief comparison of Illinois with other states in terms of its approach to basic skills in vocational education. Finally, from your perspective, please comment on the importance of basic skills training and attainment in vocational education.

Optional Question

5. Given that one of the major outcomes of this Seminar will be recommendations for policy to the State Office concerning the method of treating Basic Skills Training in Vocational Education, do you have recommendations that you would like to state at this time?

Recommendations:

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4. School administrators often decry the lack of communication between various members of their staff (i.e. counselors, subject specialists, vocational education teachers.) They feel this lack of communication often results in:

   A) impeding early identification of students who may need additional training in basic skills,

   B) failure to recommend and utilize successful methods of remediation.

   From your perspective, please outline (identify) practices that you feel (1) would be appropriate and would enhance communication between various staff members, (2) improve the early identification process of those students who need further training, and (3) improve the utilization of successful remediation strategies.

Optional Question

5. Given that one of the major outcomes of this Seminar will be recommendations for policy to the State Office concerning the method of treating Basic Skills Training in Vocational Education, do you have recommendations that you would like to state at this time?

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3. Each of you has a specific role in vocational education. Given the specific and possibly unique aspect of your role, what do you believe should be done to solve or deal with the basic skills "problems" that vocational education faces?

4. There are those who contend that one proven way to improve basic skills training in vocational education is to include within the teacher training curriculum sufficient course work that would enable vocational education college graduates to teach basic skills.

   A) Is this, in your opinion, an appropriate strategy and why? (You may choose to list possible advantages and disadvantages.)

   B) If appropriate, how could this strategy be best accomplished?

Optional Question

5. Given that one of the major outcomes of this Seminar will be recommendations for policy to the State Office concerning the method of treating Basic Skills Training in Vocational Education, do you have recommendations that you would like to state at this time?

   Recommendations:

QUESTION 1

1. There are certain assumptions associated with vocational education. One of the more prevalent maintains that training in basic skills will enhance one's opportunities in three ways; (1) in completing a vocational education program; (2) in advancing in the work place; and (3) in being retrained and therefore retained during times of economic retrenchment. In your experience what has been the validity of this assumption? If any part of this assumption is invalid, what could be done to increase its validity?

Essentially these assumptions are true. The basic questions are: Who is responsible? What is the best delivery system for providing basic skills for vocational students?

QUESTION 2

2. The question of how to introduce basic skills training into vocational education has been asked often. Various intervention strategies have been identified. These strategies range from having a reading specialist solely responsible for the remediation of basic skills deficiences to having the vocational education teacher attempt to remediate these skill deficiencies in the classroom. Please comment on the likely effectiveness of each of these strategies as well as other intervention strategies with which you are aware.

General comments and Concerns

Educators need to make some decisions for responsibility of basic skills. Many vocational educators at the secondary level feel that: The point of entry into the labor market by youth is from the secondary educational level. It is here that the flood of raw material (job seekers) emerges, and tragically all too often many are unable to bridge the gap from school to employment (work) for lack of adequate basic skills. The academic preparation of youth up to this point has not been the responsibility of vocational education, for it is only at grades 11 and 12 that vocational education programs exist. Therefore, academic educators must accept the responsibility and challenge of basic skills preparation. It is vocational education's role to build those employability skills appropriate to entry-level and/or post secondary continuation that will enhance the success factors of youth as they move forward into their personal future.

QUESTION 2.

PART 1. Comments on having a reading specialist solely responsible for the remediation of basic skills.

This is an excellent approach--using a team with a positive attitude toward educating the student.

This has been observed in some area vocational centers and LEAs and appears to be quite effective. Students see reading, writing, and computation as meaningful and necessary. Basic skills are made relevant with this approach. Teachers are trained specifically for assuming remediation responsibilities.

QUESTION 2.

PART II. Having the vocational education teacher attempt to remediate these skills deficiencies in the classroom.

All teachers must think of themselves as teachers of students first. Basic skills should be seen as an integral part of employability skills preparation.

The concern for this approach are comments such as:
Vocational teachers don't have time to incorporate basic skills into their curriculum.
Vocational teachers are not trained to teach basic skills or skilled in providing remediation.

QUESTION 3

3. Each of you has a specific role in vocational education. Given the specific and possibly unique aspect of your role, what do you believe should be done to solve or deal with the basic skills "problems" that vocational education faces?

Vocational education must be part of the total education for the student. Local educational agencies should organize their educational programs as follows:

The education basics in public education need to include:

1. All classes should start with and grow out of a careful and detailed analysis of the particular tasks to be mastered or undertakings to be completed. The careful and detailed analysis should progress through and include:
   (1) The specification of required knowledges and skills--(What do we need to know in basic skills and hands-on skills?)
   (2) The determination of the objectives which yield mastery of those specified required knowledges and skills;
   (3) The development of the content and techniques for mastering the objectives;
   (4) The description of the organization of the classroom program; and
   (5) The methods of evaluation and improvement of the classroom program.

QUESTION 3

2. Vocational education is thorough and efficient when it is performance-based and has an accountability component. The emphasis should always be on active skill practice and demonstrated mastery of knowledge. Students should practice both the task elements and the entire task.
3. Students should not progress until they have reached a preset standard of performance. The assessment of a standard should be go/no go, yes or no. The student who does not reach a criterion level should receive additional practice until he or she does master the objective. Let's examine 13 years of non-belligerent seat time as the only criteria for a high school diploma.
4. Students learn best in a proper functional context. Medical students are best trained in job-relevant situations; so are lawyers and plumbers. Theoretical or technical material must be presented along with "the doing." (Reading related to training; math related to training, etc.)
5. For various reasons people learn best at different rates and in different time periods. Thorough and efficient teaching uses a mix of self-paced methods, personalized methods, and group-paced methods.
6. Without knowledge or results there can be little improvement. Thorough and efficient vocational training is built upon feedback from the learner and from the evaluation of both the instructor and the instruction. The student must be guided by continuous formative results enroute to task mastery.

7. Over all the vocational education process stands <u>quality control</u>. To discover whether or not the system is working as it should, a quality control system must be built into each phase of the program. Formal and objective reporting of results should be required. We must stand for quality.

QUE TION 4

4. School administrators often decry the lack of communication between various members of their staff (i.e. counselors, subject specialists, vocational education teachers.) They feel this lack of communication often results in:

A) impeding early identification of students who may need additional training in basic skills;

B) failure to recommend and utilize successful methods of remediation.

From your perspective, please outline (identify) practices that you feel (1) would be appropriate and would enhance communication between various staff members, (2) improve the early identification process of those students who need further training; and (3) improve the utilization of successful remediation strategies.

1. At the risk of being an egotist, I have enclosed the following article:

What It Means To Be Principal

by Peter L. Johnson

CO-OP COORDINATOR: Hi! How are ya'?

BIOLOGY TEACHER: Fine, but that Kelly kid is crazy!

CO-OP COORDINATOR: What? A bad Tuesday?

BIOLOGY TEACHER: That Kelly kid! He hasn't turned in a lab report this quarter. And yet, he has time to go to work in the afternoon!

CO-OP COORDINATOR: Gee! He's a fine worker downtown at Steward Brothers...

BIOLOGY TEACHER: Well—yeah! Huh!

How often have those of us in vocational education been drawn into negative back-biting conversations with other educators in our building that sound much like the "professional discussion" above? And, how often have we felt that the comments were directed to us as much as to our own students?

Not only does the general education teacher register disgust, but the vocational educator, surprised or dismayed by the insensitive comments, feels there is little to satisfy the other angry teacher. Soon this rift grows until there may be little or no communication or articulation among professional staff.

Unfortunately this happens many times, and often without the knowledge of the school administrator. Or if the administrator is informed, it may be only one-sided. The solution isn't always easy, and the students can be the losers when they try to learn in such a biased atmosphere.

As a former vocational teacher, I used to detect this kind of attitude on the part of general education teachers. However, after much soul searching, it dawned on me that this was an entree to improving relationships with my colleagues.

My answer became "What can I do to help this student do better in your class?" and then I proceeded to attempt to do something about it. I also realized that, I, as a vocational teacher, had students in class because they elected to do so; whereas, the general education teacher had them in class because students were required to be there. There is the big difference.

Another frustrating or negating situation often facing building leaders is a turf problem. Professional staff, whether general or vocational, are often protective of their courses and programs, and although teachers are employed to teach students subject matter, administrators sometimes hear staff say they are teachers of science, teachers of home economics, teachers of math, and so on, and indeed they are. However, this attitude sometimes takes away the real reason we are all in education. We need to think of ourselves as teachers of young people who are taking industrial arts, science, home economics, math or whatever.

Avoiding the Split

Problems such as these can be the cause of a split of professional staff, and it is up to all responsible for the education of students not to let this happen, or if it does become a problem, to seek solutions that ultimately will bring about an educational program that is student centered.

In all of these learning situations, the building leader is responsible and is the key to providing a good working relationship between all staff members regardless of their teaching assignments, whether they are general education or vocational. Unless this is done, all those concerned with the educational program will suffer, and ultimately the "building" will become a stifling place for students to learn and an undesirable place for teachers to teach. Thus, the total educational development of *each* student provided through the leadership and supervision of the building leader is every administrator's number one responsibility.

Honest and open communication—fostered through such efforts as in-service and public relations activities—can do much to create a team spirit between general and vocational educators. Ensuring this cooperation is one of the most important responsibilities of the school leader.

Familiar performance responsibilities of building leaders often include the following activities:

- Establish and maintain an effective learning climate in the school;
- Program classes within established guides to meet student needs;
- Keep abreast of trends, developments and research as they pertain to education and school operation;
- Assist in the formulation of curriculum and other objectives for the school programs.

While educational leadership is essential to any school program, there are many activities building leaders can use to cement positive relationships between professional staff members regardless of their teaching assignments or loads. Worthy of special consideration are in-service activities such as

professional meetings and committees representing a cross section of disciplines, and public relations programs.

In-Service Activities

In-service activities for the improvement of the professional performance of teachers is a significant aspect of administrative responsibility of the school leader. It requires clarity of purpose and direction, extensive knowledge and skill, deep professional commitment and penetrating insight into the capabilities and potential of all professional personnel.

Many barriers may need to be surmounted if in-service programs are to become important and effective. However, they can be a productive avenue to improving relationships of staff and infusing all curriculums with alternative plans.

The in-service program should be aimed at improving professional performance. Increased teacher competencies should be sought in relation to understanding of the learning process, mastery of subject matter, ability to identify and reach important teaching-learning objectives, insight into teaching methods and learning experiences required in competent classroom performance and effectiveness in working with both students and faculty members toward cooperative achievement of the building goals.

The programs should be characterized by an atmosphere of inquiry. Many important areas of professional inquiry exist in all school systems. Among these are: the study of patterns of effective behavior in *relation to co-workers*, the classroom and community; the exploration of means for providing for individual differences among pupils; and the assessment of avenues for utilizing community resources and enlisting the cooperation of community members.

The program should seek active engagement with worthwhile problems in an atmosphere of freedom and psychological safety. The building leader's role in providing an appropriate anxiety-free climate is most important to the success of in-service programs. This, however, means neither the abdication of responsibility, nor the assumption of a laissez-faire attitude.

The building leader has responsibilities in: leading teachers in the identification of important barriers blocking staff cooperation; suggesting fruitful ways in which problems might be approached or studied; utilizing professional meetings to foster exchanges among professional personnel; and participating with individuals and groups in designing guidelines for solutions.

> "The building leader's role in providing an appropriate anxiety-free climate is most important to the success of in-service programs."

The program should make provisions for group activities. Opportunities for participation in study councils, group projects and workshops should be made available to all staff members and should be structured to ensure participation and cooperation of general education and vocational education teachers.

A good image of education, whether it be general or vocational, is achieved through the combined efforts of many individual groups. Satisfied faculty members, students, parents and others who are convinced of the merits of all education are much more effective in developing a positive image toward education than the building leader alone. Nevertheless, it is essential for the building leader to provide an environment and leadership that will strengthen the bond between all teachers as well as students, parents and the general public.

Here are some approaches building leaders should consider:

Keep the faculty informed about the relationship of all curricula as a part of the total school program.

Supply faculty members with the requirements of job opportunities available to their students.

Join with other faculty members in special school projects, parent-teacher association activities, parents for talented and gifted, band, FFA, FHA, and so on.

Develop a plan to keep the faculty informed about the business world, including minimum hiring requirements, types of students desired, academic background preferred, opportunity in the field of business.

Solicit assistance and advice from other faculty members. For instance, ask the English teacher to help on the Essay Contest on "Selling as a Career," sponsored by the National Sales Executive Club.

Plan a faculty study group in which business representatives are invited to discuss current economic trends in the community and the nation.

Recommend participation in summer work experience or similar industrial or business programs to teachers in all fields of teaching.

Invite representatives of business and industry to meet with the faculty to discuss job opportunities for students and necessary qualifications—not simply to get a job, but to *keep* a job.

Encourage faculty members to use

Business-Industry-Education-Labor Day as a basis for class project work or a civic contribution.

Invite business leaders in the community to visit vocational and general education classes several times each year.

Take an active interest in the counseling functions of the school and encourage your teacher colleagues to do likewise.

Participate with faculty members in making bi-annual community occupational surveys.

Invite counselors to participate in vocational education conferences, both local and state.

Encourage faculty to become active with you as members of business and service organizations.

Circulate articles, reports and other information that will help others determine the needs for vocational education training.

Show the faculty ways in which the public relations program of the school is served through the vocational education program, including cooperative occupations and adult programs.

A Total Counseling Program

Emphasize the need for a total counseling program—one that includes occupational counseling as well as academic.

Encourage faculty to give occupational information when it is needed—not just in groups according to a set schedule; use life-time education philosophies.

Involve general education faculty in important vocational education activities; for example, invite them to employer-employee banquets; consult them in placement recommendations; or invite them to participate in classes and field trips.

Display on faculty bulletin boards photographs of various general and vocational education events and activities.

Emphasize, especially to faculty members, the dignity of all kinds of useful human labor. Discourage the common tendency to glorify certain kinds of jobs at the expense of others. Question thinking that would reflect the traditional idea that the purpose of a "liberal" education is to liberate people from human endeavor.

Suggested activities for teachers:

Give credit to the administration in publicity releases whenever possible.

Supply administrator with articles, reports and other information about programs, courses and activities.

Help in a continuous study of the local community and school problems that would reveal the following: school retention rates; percent entering and graduating from college; vocational choices and availability of jobs after graduation from high school; and reactions of former students toward their high school preparation.

Determine and demonstrate the needs for more functional furniture, up-to-date equipment and machines, adequate space, and qualified teachers.

> "Administrators sometimes hear staff say they are teachers of science, teachers of home economics, teachers of math . . . We need to think of ourselves as teachers of young people who are taking science, home economics, math, or whatever."

Invite school administrators to speak before classes.

Inspire the confidence of your administration through the business-like manner in which you perform your duties.

Make film strips or slides that administrators can use in community groups to portray the work being done in classes.

Make use of display cases in which students can exhibit their projects.

Report to your administration at periodic intervals about your activities, progress and problems.

Evaluate your program with your administrator and make recommendations for improvement in line with the evaluation.

Clear current and proposed public relations activities with administrators.

Some Guiding Principles

The building leader must continually adhere to the following principles if he or she is to strengthen the partnership between general education and vocational education: (1) Education is the primary purpose of the school. The good will and cooperation of all school employees must be secured if the optimum education of the student is to be accomplished. (2) Maximum effectiveness of the means for achieving education requires the best possible selection and coordination of all elements comprising those means. The means are comprised of school employees, plant and supplies.

It is the duty of the school leader to assure the optimum in the selection and assignment of staff, physical placement, and personnel equipment. (3) The school leader must show appreciation and provide for recognition of all staff members. (4) The school leader must provide for a continuous flow of significant information and keep lines of communication open. (5) The school leader must provide for fairness in work load, and the working period, or conditions that are auxiliary to the job.

Even when a building leader follows all of these guidelines, he or she may not have a foolproof solution for the biology teacher who has a problem with "that Kelly kid." However, when these guidelines are augmented by in-service efforts and public relations, chances are that the staff will strive for the total education of each student.

I am reminded of a recent example of cooperation that grew out of a local in-service seminar. After an hour of round-table discussions among faculty members from several departments, an electronics/welding teacher and an English teacher agreed to share their own enthusiastic assignments.

The welding teacher had long wanted senior boys in his class to read two or three articles from career pamphlets and magazines available in his classroom, so they would be more aware of local job opportunities. He also wanted them to sum up these opportunities in a two-page paper with a bibliography. For years the young men balked at such nonsense. Then, after the seminar, the English teacher gave them the same assignment: "Choose two or three articles about a career that you feel somewhat interested in. Vocational departments in the school will guide you."

With just a few student conferences and a little direction from both departments, students amazed their teachers and themselves with neat, concise, meaningful notes. They were proud of their own career findings.

About the Author

Peter Johnson is principal of Sycamore High School in Sycamore, Illinois.

QUESTION 4

2. Early identification of those students who need further training. LEAs should incorporate a program which:
   1) Establish an Individualized Vocational Plan (IVP) for all students and utilize it to evaluate and assess the progress of each student.
   2) Involve all staff responsible for the IVP in its development and monitoring. (Appropriate counselor, dean, nurse, administrator, vocational teachers, and others, if needed.)
   3) Make all course work competency based.
   4) Make testing programs relevant to students needs, interests, and abilities. Utilize results in development of IVP.
3. Improve the utilization of successful remediation strategies:
   1) Utilize IVPs.
   2) Utilize team approach to serving students.
   3) Make remediation activities relevant to students vocational needs, i.e., reading in books related to vocational course activities.
   4) Utilize remedial specialists when possible. (Financial constraints may influence this.)
   5) Insure that vocational teachers incorporate basic skills as they relate to their courses in their curriculum.

QUESTION 5

Optional Question

5. Given that one of the major outcomes of this Seminar will be recommendations for policy to the State Office concerning the method of treating Basic Skills Training in Vocational Education, do you have recommendations that you would like to state at this time?

1. All vocational classes should start with and grow out of a careful and detailed analysis of the particular tasks to be mastered or undertakings to be completed. The careful and detailed analysis should progress through and include:
   (1) The specification of required knowledges and skills-- (What do we need to know in basic skills and hands-on skills?)
   (2) The determination of the objectives which yield mastery of those specified required knowledges and skills;
   (3) The development of the content and techniques for mastering the objectives;
   (4) The description of the organization of the classroom program; and
   (5) The methods of evaluation and improvement of the classroom program.
2. Make all vocational courses competency based and include basic skills as they relate to each in the course content.
3. Encourage all vocational teachers to assume responsibility for basic skills as they relate to the courses they teach.
4. Include the teaching of basic skills in the teach education pre-service programs.
5. Expand inservice activities to assist vocational teachers to obtain the competencies necessary to teach basic skills as they relate to their courses.

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PRACTICAL & TECHNICAL ARTS

May 5, 1981

FROM: Philip A. Viso

TO: Mr. George Olson, Mr. Albert Bennett
Roosevelt University
430 South Michigan Avenue
Chicago, Illinois 60605

SUBJECT: BASIC SKILLS/VOCATIONAL EDUCATION SEMINAR
RESPONSE TO QUESTIONS 1 THROUGH 5

Dear Messrs. Olson and Bennett:

Question 1. Basic Assumptions

a. Basic skills will enhance one's efforts in completing a vocational education program.

Response:

Changing technology requires knowledge in science, mathematics, and communications if the trainee is to be assured a relative degree of continuous employment through the year 2000.

b. Advancing in the work place--

Response:

Basic skills gain relevance when one looks at an occupation from the career ladder point of view. A sound background in basic skills, including computer literacy as it relates to all occupations, is essential if one hopes to climb the career ladder. As we move into the 90's, I would seriously doubt that career ladder opportunities will exist when a void in basic skills, coupled with a void in computer literacy, is present.

c. In being retained and, therefore, retrained--

Response:

Without basic skills, it is virtually impossible for one to be retrained and, therefore, to become a valued asset to the industrial or business labor market. For example, an "alley" mechanic, a person who learned his trade working on cars without acquiring basic literacy, chemistry, physics, etc., was a valued member of the automotive labor force. Modern technology, which includes computer diagnosis, emission control systems, sophisticated electronic gadgetrery, and so forth, could not be understood by this person. Consequently, retraining of this individual would, at best, be improbable. However, if this individual could read and write and had developed a background in the laws of physics, chemistry, basic mathematics, fundamentals of electronics and so forth, this individual could readily be retrained as the technology of manufacturing and services changed.

Question 2.

In order to respond to this question, one must isolate the various publics which are being served by vocational education and the goals of the programs established to serve these publics. Obviously, those young people coming through the K-12 pipeline must be provided with a basic curriculum which encompasses all of the basic skills along with strategies for delivery and management of educational programs which will insure as closely as possible that the skills are being "taught and learned".

At the secondary school level, it is essential that lines of communication between departments in secondary schools be open to insure that proper emphasis is given to the total development of the learner, further insuring that the academic instructors and vocational instructors work as a team to insure that the theoretical aspects of instruction which are carried on in the classroom coordinate with the hands-on practices of the vocational lab. For example, the physics teacher teaches Archimedes' Principle, the vocational teacher teaches the application of that principle. If the physics teacher could relate the instruction to what is going on in the vocational lab, and the vocational teacher could relate the instruction of the Archimedes' Principle to the physics program, the student would benefit from the positive reinforcement.

If the reading and English teachers, and the math teachers could relate the instruction carried on in class to the vocational application, and the vocational teacher reinforced the efforts of these teachers, the student would again benefit from the positive reinforcement.

Question 3.

Response:

The problem of basic skills should be addressed in the following manner:

a. Establish bench-marks of achievement in all curricular areas as a first step in arriving at competency based instruction in K-12 curriculums.

b. Identify and isolate basic skills needs present in all orientation-level vocational programs. Integrate teaching of these skills into an instructional management system which assures that these skills will be taught in both the academic and vocational framework which complement each other in the instructional program.

c. When working with older youth or adults in vocational areas, attempt to stay away from the stigma of remedial basic skills instruction. Proceed from the concrete to the abstract theoretical concept. Remedial programs in reading, mathematics, etc., should be developmental, presenting information directly relevant to the vocational undertaking while teaching the basic skills.

Question 4.

As we begin to specialize educational staff, we become guilty of over compartmentalizing responsibilities, thereby, reducing effective delivery of services of students. Legions of "educators" have little or no contact with students or educational programs. While I recognize the need for specialists, I decry the fact that we specialize to such an extent that many of the specialists forget that they are there ultimately to enhance the educational process. With many of these specialists, departments, etc., the task orientation is such that the most important thing becomes the task or process, irrespective of whether that process enhances or takes away from the educational process.

We are embarking on an era wherein the ability of educators to run educational institutions is being challenged, where Boards of Education are looking to business and industry and other sources for specialists who have little or no knowledge of the field of education. Complicated processes are developed, for the channeling of purchase requisitions into massive computer systems. The slightest error in processing the requisitions from the teacher's hands through the computer, negates the purchase request. Turn around time often is so long that accounts are closed by the time teachers become aware of the fact that the request was not processed because of error. Counselors often time beleaguered with "administrivia" and paper work have little time to learn about program offerings or the students they serve in the schools in which they are assigned.

Messrs. Olson and Bennett May 5, 1981

Schools are organized into departments such as the English Department, the Math Department, the Graphic Arts Department, and so forth. Teachers do not meet on interdisiplinary common grounds to share problems or develop understanding with respect to the total instructional program or the individual child. I, therefore, recommend the following:

1. A non-traditional line of communication be established in each school over and above the traditional departmental lines. This non-traditional line of communication must cause interaction between all departments within the local school, and

2. Further, that centralized agencies within school systems which are responsible for testing, special education, purchasing, and so forth be required to work within and among the faculties of the local schools to insure that testing services, purchasing, etc., and recommendations which are an outgrowth of these services are totally understood by the local school staff and are within the realm of possibility of the local school, thereby, permitting adjustments in the recommendations to occur based on the ability of the local school to deliver and participate.

Very truly yours,

Philip A. Viso

PAV:rm

P. S.

Optional Question 5

Recommendation 1. Provide funds to assist local school districts in training and retraining of vocational staff to insure maintenance of teachers' skills in accordance with the changing technology.

2. Provide incentives to assist local school districts in maintaining the quality of vocational labs in concert with the need for maintenance of technology.

3. Place a support floor under vocational education simil to the floor placed under general K-12 education.

4. Require all secondary school students complete a vocational sequence as part of the requirements for graduation from secondary school.

5. Provide transportation funds to permit students to travel to schools other than their community school to participate in the vocational program of their choi

BASIC SKILLS IN
VOCATIONAL EDUCATION SEMINAR
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Question response(appropriate and inappropriate)

1. ASSUMPTIONS ASSOCIATED WITH VOCATIONAL EDUCATION:

Personal experience finds the assumptions to be valid. The use of the term "training in" assumes that training results in the accumulation of skill and/or knowledge, which may not always be true. The only possible exception to the general validity may be the individual having knowledge of basic skills who, for personal reasons, finds it difficult or impossible to work with others in a given occupation.

2. INTRODUCTION OF BASIC SKILLS INTO VOCATIONAL EDUCATION:

I personally tend to agree with the approach that was stated by Sandra Pritz, Director of the DOL's STI Program model; . . . "basic reading, writing and computational skills must be taught in such a way that these skills have meaning in the world of work."

This statement could be interpreted to mean that present and future vocational educators should be taught the skills necessary to become proficient basic skills teachers as well as those required to become quality vocational instructors. Such an interpretation could lead to major changes in teacher-training programs, modification of the curricula of both common and post-secondary schools, and changes in the administration of vocational programs. Perhaps other models should be considered.

I am reminded of a chemistry and physics teacher discovered in a DAVTE Three-Phase Evaluation of a rural west-central Illinois high school several years ago. He was amazing both his students and administrators by teaching theoretical chemistry and physics in the auto shop, the ag lab, wood shop and(heaven forbid), the boiler room. Over a period of three years, he had more than doubled the size of chemistry and physics classes, attracting, to the astonishment of the administration, 'even' the 'vocational kids'. What was even worse, the 'vocational kids' were capturing a high percentage of the A's and B's given out. The man was not capable of walking on water, but he at least had enough common sense to determine that practical applications could be used to teach theoretical physics and chemistry, so that they were practical. To teach the method for determining the volume of a cylinder his class traveled approximately 75 feet to the auto shop, and based their study on the determination of the volume of a cylinder in an engine block. Along the way students picked up a few terms, such as Top-Dead-Center, Bottom-Dead-Center, compression, ratio, and displacement. They left with the ability to calculate the volume of a cylinder, at least one concrete application of the value of the calculation, and a little understanding of the type of knowledge and ability an auto mechanic needs to perform his/her work. Needless to say, the vocational teachers were estatic, since they could teach applications - not basic skills.

Unfortunately, education can't take credit for discovering an innovative teacher. The individual wasn't a 'trained' teacher. He was a last minute replacement, a retired engineer able to come up with a provisional certificate on short notice, to replace the 'professional teacher' who resigned late one summer to take a job outside of education. His comment to the administration when he left was that he was 'tired' of trying to teach kids who couldn't learn and weren't 'motivated'.

The materials distributed to the seminar participants stated in several ways the fact that industry(private sector) was looking at more than vocational skills when selecting an employee. Interest was expressed in such things as attitude and character. As an aside, perhaps education should take a look at its' employment criteria, highly structured at present in certification and other such academicia.

3. DEALING WITH THE PROBLEM:

If there is a solution, it is certainly not going to be an easy or singular one. There may not even be a 'right' combination of answers. Elementary schools in the state of Illinois have not grasped the intent of the Career Education concept(at least in my opinion). Too many teachers and administrators viewed it as simply another add-on to an already overcrowded curricula, and wrote it off. A few adopted part of the concept, but usually on a classroom by classroom basis at the initiative of the individual teacher. This results in virtually no transferability from grade to grade. It is probably too late to bring 'Career Education' back, but the concept should not be lost. It correctly assumed that every teacher was a vocational teacher, with a responsibility to develop basic skills from a practical foundation.

At the secondary level the answer, in my opinion, is certainly not the conversion of every vocational teacher to a basic skills teacher. While there should be a familiarity level of development, full teaching capability is neither needed or desired. There is a responsibility on both sides of the aisle(vocational and non-vocational) to ensure that program leavers possess basic skills. The majority of that task falls with the general education group of faculty. I believe it more feasible to teach those trained in basic skills education the non-technical aspects of vocational education than to retrain vocational teachers with the skills needed to become a proficient basic skills teacher. If the aim of the public school setting is the 'whole person', then more than the vocational teacher should become involved in the process.

One of the most difficult and important achievements which I feel must be made is the development of the attitude on the part of non-vocational teachers that since 50% or more of their students intend to enter the labor market after completion of secondary schooling, they are in fact and practice vocational teachers. I feel that most vocational teachers view their role as dual, educating both the transfer student and the employment oriented one. General education teachers, for the most part, see themselves serving only the transfer student. When this attitude is changed, many of the other problems will take care of themselves.

4. BASIC SKILLS IN VOCATIONAL TEACHER PREPARATION:

As could probably be guessed by the response to number three (3) above, I am not going to be a major supporter of modifiying all teacher-training programs so that every vocational graduate from 1981 on is also a skilled basic skills instructor. There should be an awareness level developed, so that the vocational instructor can work in cooperation with those trained in basic skill development. This would include such areas as recognition of problems in learning caused by a lack of basic skill, carrying out a remediation program under the direction of a skilled teacher trained to develop such programs, etc.

Beyond this level of training, I will have to be convinced that further training is in the best interest of the student, community, school and teacher.

BASIC SKILLS AND VOCATIONAL EDUCATION

ROOSEVELT UNIVERSITY

Presentation

by

Dr. Robert C. Rubenow

May 14, 1981

1. There are certain assumptions associated with vocational education. One of the most prevalent maintains that training in basic skills will enhance one's opportunities in three ways: 1) in completing a vocational education program; 2) in advancing in the work place and 3) in being retrained and therefore retained during times of economic retrenchment. In your experience what has been the validity of this assumption? If any part of this assumption is invalid, what could be done to increase its validity?

This assumption can be valid if all of us agree regarding the definitions of vocational education and basic skills. I do not believe the assumption is necessarily valid if basic skills are considered to be reading, writing, and arithmetic. Nor do I believe the assumption is valid if vocational education is limited to the subject areas of agriculture, business education, home economics, health occupations, and industrial arts.

Reading, writing and arithmetic are learning tools which we want all students to possess, but they are tools, not ends in themselves. We all have opinions of what skills are basic. I would suggest that basic skills might include: creative thinking; analysis and problem solving; vision; persistence; persuasion; handling conflict; and judgment. Others might add to or delete from that listing, but the point is that the development of learning tools without knowing their application to the real basic skills will likely not have the desired impact on our students as future workers and citizens.

I am also concerned with the often-used general definition of vocational education. Is a student who determines at 15 years of age that she wants to become a math teacher, takes four math courses in high school and pursues the math education curriculum in college, in a vocational education program? Is only the 14-year-old who requires metals courses in industrial arts and plans to become a machinist after graduation from high school a legitimate vocational student? We know, of course, that as we consider basic skills in vocational education today we are narrowing our discussions to vocational education as it relates to the labor force. But I caution each of us as participants in this seminar not to view vocational education as an isolated

segment of the curriculum (at least through secondary school). If vocational education is preparation for a career, then how similar vocational education and general education must be. Who among us does not have to think about a career--performing some useful, productive, and monetarily rewarding job in the work market?

It is certainly obvious to assume that a person who has command of the basic skills and the tools which enable him to perform those skills will obtain employment, will advance in that employment, and will be able to retrain when the need and/or opportunity do arise.

RCR
14May81

2. The question of how to introduce basic skills training into vocational education has been asked often. Various intervention strategies have been identified. These strategies range from having a reading specialist solely responsible for the remediation of basic skills deficiencies to having the vocational education teacher attempt to remediate these skill deficiencies in the classroom. Please comment on the likely effectiveness of each of these strategies as well as other intervention strategies with which you are aware.

If basic skills training refers to instructional strategies which help students master the basic learning tools, then they should not be introduced into vocational education; rather, these instructional strategies should be a part of all course offerings. (I am applying these remarks to the secondary school.)

The reading specialist can be very effective helping students improve their study skills (not just limited to reading skills). Unfortunately, the more effective the reading specialist may be (at least in the eyes of the teachers), the more willing the teaching staff is to let this person assume the full responsibility for teaching study skills. There is no reading specialist who can singly achieve the task of developing appropriate study skills with each student.

Teachers often know the ingredients of good study skill strategies, but like the professional athlete who must consistently review and polish the most basic of skills, the classroom teachers needs to be renewed and reminded of these ingredients through workshops, staff development activities, and critiques of classroom observations. All teachers, preferably in conjunction with the reading specialists' goals and objectives, must attend to learning theory which enables them to help all students with their learning skills. School administrators and teachers should be well aware of teaching strategies which help achieve this goal.

Generally, teachers should organize their instructional material so that all parts fit together; establish a relationship between what is known and what is to be learned; help learners understand the relevancy of the new information; and, engage learners in mutual

activities which will help the material to be retrievable. Learning activities might include advanced organizers, structured overviews, study guides, vocabulary games, and audiovisual aids.

While vocational teachers sometimes think the reading specialist and the English teachers should be primarily responsible for the teaching of basic study skills, it is in fact critical for them to be responsible to do so. The task is no one person's responsibility, but everyone's responsibility. It is almost so simple it is difficult, because the common sense of the task causes too many teachers to believe they are doing those things already.

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3. Each of you has a specific role in vocational education. Given the specific and possibly unique aspect of your role, what do you believe should be done to solve or deal with the basic skills "problems" that vocational education faces?

The "basic skills problem" can probably be interpreted to mean that too many students are not able to read and write. While many of these students may be enrolled in vocational courses, the problem can hardly be related only to vocational education.

One of the difficulties in finding solutions to any area of education which needs improvement is that there is no one answer. When the public demands more emphasis on basic skills, we have to know "what public" and "what that public means by basic skills." A variety of approaches is needed to meet the variety of public preferences and pupil needs. Reform movements are not new; we are constantly trying to define a new consensus. Whatever we attempt to do should consider the thinking and suggestions of others, but must ultimately be whatever the local community and school staff can accept as feasible for the local educational institution.

The following ingredients of a program to develop students' academic abilities seem to me to be essential:

1. Schools (secondary) are not established to be college preparatory or vocational or performing arts schools or whatever; rather they must help all students become contributing citizens and productive wage earners to the maximum extent the students' abilities permit.

2. A system of diagnosing students' cognitive learning skills and attitudes should be in existence. The diagnosis should include areas of strengths and areas in need of improvement. It should also include identification of preferred learning styles.

3. A school program designed to help students master basic learning skills should include both the development of basic learn-

ing tools (reading, writing, and arithmetic) and experiences in the arts, in the humanities, and in areas of concern for others. A good mexture of developing the basic learning tools and experiences in the arts and the humanities will help foster skills for working in any career, for thinking creatively, and for analyzing and solving problems (as well as the other basic skills specified earlier in this paper).

4. An ongoing staff development program should be evident--a program which helps teachers rekindle, revitalize, and refresh their own basic skills. Tired, unmotivated, no-longer-caring teachers will hardly be able to spark enthusiasm and interest in students, even when performing the teaching act technically perfect.

All of this says nothing of the changes in society regarding information gathering and processing, family structure, both parents a part of the labor market, and society's attitudes in general. School personnel must do everything possible to obtain and maintain the support of parents so each can reinforce the other. The task of the schools becomes increasingly difficult, but good teachers constantly seek better ways to effect learning.

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4. School administrators often decry the lack of communication between various members of their staff (i.e. counselors, subject specialists, vocational education teachers.) They feel this lack of communication often results in:

   A) impeding early identification of students who may need additional training in basic skills,

   B) failure to recommend and utilize successful methods of remediation.

   From your perspective, please outline (identify) practices that you feel (1) would be appropriate and would enhance communication between various staff members, (2) improve the early identification process of those students who need further training, and (3) improve the utilization of successful remediation strategies.

The easiest solution to the challenge presented here would be to hire quality professionals whose philosophies of education are in concert, who readily agree on how to divide staff responsibilities, and who maintain a constant enthusiasm for their tasks along with an ongoing appraisal of their performance. While this is possible, it is not very probable that we can locate very many staffs which completely meet these specifications. It is more likely that a staff of ten or twenty or fifty teachers would not agree among themselves how best to organize and develop a program to meet the specifications stated. Just as parents and the community in general have different ideas regarding what the school should be, so the highly educated teaching staff, each with individual opinions of what the educational program should be and with a strong sense of professional independence, would not likely agree on a course of action.

Even with differences of opinion among a group of teachers, and even with teachers who are less than perfect, certain actions can be taken to enhance school effectiveness in identification of student needs and related courses of action.

1) Communication between various staff members can be enhanced by:

   a. Establishment of school priorities for the educational program. Determine the basic skills students should

possess; determine what learning tools are necessary to attain these skills.

1) Specify the courses of study which meet these priorities and establish course requirements for graduation.

2) Specify courses which complement the required courses but which may not be required of every student; these courses become the electives.

b. Diagnose the strengths and the weaknesses of each student relative to basic learning tools.

c. Develop a tentative four-year (high school) schedule of classes for each entering student, reviewing the program in the spring of each school year and making adjustments as necessary.

d. Assign counselors to be liaisons between the counseling department and the various departments.

2) The early identification of students who need special attention can be improved by the following steps.

a. A minimum student competency testing program which tests for mastery of the basic school objectives in the areas of reading, writing, and mathematics. The test questions must match designated course objectives (such as English 9 and 10; general math). A record-keeping and monitoring system to provide individual data should be an integral part of this program.

b. Students who are experiencing difficulty in the mastery of the basic study tools should be referred to the reading specialist for additional attention. The reading specialist should specify the learning characteristics (deficiencies) of the students to be referred.

c. Departments should maintain folders for individual students with appropriate data and samples of class work so that all teachers in the department can work together with individual students with some continuity. This is most applicable to an English department.

d. A tutorial program should be established for students who evidence continual difficulty in mastering the basic learning tools. Counselors should be responsible for the monitoring of these students.

3. Successful remediation strategies become increasingly difficult as the student progresses in grades. Those students who enter high school reading at the second or third grade level, and/or who have experienced continual failure in math classes, and/or whose self-concept and attitude reflect the lack of school achievement, present a challenge for any educator. However, these students can learn and in many cases can be remediated to the extent that they become productive and contributing citizens. The following practices are helpful to this process:

a. Continually remind staff that these students can achieve, that we must have expectations for these students and clearly communicate these expectations to them.

b. Administrators and teachers must work together to continually find teaching methods and strategies which are successful with these students. This can be accomplished in part through (1) an organized staff development program which addresses issues related to remediation strategies, and (2) department meetings organized to help teachers realize success in the classroom with these students.

Question 4
Page 4

c. Include a staff appraisal and evaluation system as an integral part of the improvement of instruction system. This system should integrate establishment of school year goals by the staff on an individual basis, frequent classroom visits by supervisors and administrators, and written communication to the staff relative to areas of strength and areas in need of improvement. The appraisal system must relate both to established, desirable competencies and the basic goals and directions of the school system.

BASIC SKILLS

SEMINAR

1. All three assumptions are valid to some degree; however, we are able to document #1 in the school setting. Numbers 2 and 3 are documented in an informal fashion, but I would suspect there is little formal evidence available. Students who lack certain basic skills are probably more likely to complete a vocational program and thus a high school diploma or certificate program than an "academic" student. This probably contributes to the problems of validating numbers 2 and 3, because employers generally conclude that a program completer possesses basic skills.

   Because employers have always placed a high value on basic skills, we can probably conclude that numbers 2 and 3 are valid, but more evidence should be gathered. This evidence is essential because we also hear a great deal about employee advancement and retention being based more on people skills than job skills.

2. Again, both of the strategies described have been utilized with varying degrees of success. Remedial academic programs at the secondary and adult level seem to depend on the effectiveness of the instructor, while integrating basic skills into vocational programs seems to depend on the philosophy of the vocational instructor. This is to say, does the vocational instructor perceive basic skills as his or her job, and will they take the time away from skill development.

   There is probably more basic skill instruction taking place in vocational programs than one might suspect, but the deficiency is so great and the problem so evident that these efforts are overshadowed.

3. The role of the vocational administrator in dealing with the problem of basic skills should include the following:

   A. To insure that basic skills instruction is built into the vocational curriculum.

   B. To provide a linkage between remedial basic skills personnel and vocational personnel.

   C. To serve as a basic skills resource for vocational teachers.

   D. To promote the most productive methods for providing basic skills.

4. As long as the traditional school setting that includes overworked teachers with no time to concentrate on effective communication continues, there will be little change. Instructional staff must have time to help assess students, localize curriculum and develop new instructional strategies. This time must be carefully supervised to insure that goals are met and instruction improved.

4. (Continued)

There is little need to improve early identification if nothing is done with the data. The technology exists to identify students who lack basic skills; now the resources must be provided to develop individualized plans and to implement remediation.

5. There is a rapidly developing notion at the federal and state level that the basic skills problem is one in need of solution and that it will require more resources. It is also being assumed that this will be the job of the schools and that vocational education should probably play a significant role. It appears that this is as far as the concept has gone and that some significant efforts in the area of strategy must be made.

Little attention is given to the concept of revising vocational education in order to facilitate better basic skills instruction. This strategy may hold out hope in that a number of historical problems could be attacked.

- Teacher training institutions need to make basic skills a part of vocational education programs, helping vocational teachers see that there must be instructional time devoted to something other than just skill development.

- If more vocational training were conducted at the job site, students would see the need for basic skill proficiency and would be more likely to learn the specific basic skills needed for job success and advancement.

The State Office should be encouraged to:

- Foster a change in vocational teacher education programs to include a new emphasis on basic skills.

- Promote more skill training at the work place and a stronger education, business and industry partnership.

- Provide resources for the purpose of freeing vocational teachers to plan, implement and evaluate basic skills instruction.

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Donald F. Morthead, Chairman
Illinois State Board of Education

Donald G. Gill
State Superintendent of Education

May 11, 1981

M E M O R A N D U M

TO: Henrietta Schwartz

FROM: John S. Washburn

1. Conversations with employers suggest that acquisition of basic skills is (at least) as important as understanding of job-related technical skills and employability skills, Using R. Evans classification of the types of vocational training these precepts hold true for job specific, occupational specific and occupational area training. A major concern centers around not being able to assess the extent to which a student needs remedial help prior to enrolling in a particular vocational course and then adjusting content to remediate basic skill deficiencies.

2. In my opinion, we need to move into a student-based system that first assesses a student's strengths and weaknesses then provide adjustment strategies to allow for successful completion of a vocational education course or program. I'd like to see some type of professional system that uses individualized materials that help "ready" a student. These materials might incorporate career information as a learning medium. I don't believe a vocational instructor can be expected to incorporate basic skills instruction into an already cramped curriculum. The back end of the process after training is employability skills acquisition. A take-off on the Individualized Employment/Education Plan. It has a lot of implication for career counseling.

3. See #2 above. We need to utilize existing assessment and learning materials from the other disciplines. I advocate a traditional rehabilitation model. Assess the problem then remediate it for successful adjustment. Title I and Adult Education have some excellent materials.

4. Illinois has not aggressively attacked the basic skills problem. It's well recognized as a concern among educators and employers but we need to make sure that we can impact on the problem. Is it a vocational education problem? If we can tackle this concern in a slow, methodical

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4. (Continued)

manner, we'll make good inroads for the profession. I've got a good feeling about development of an individualized system that's manageable that can impact significantly on career development.

Basic Skills/Voc. Ed. Ronald W. Stadt

Questions/May 14, 1981, Chicago

1. The three assumptions are, of course, valid in some places, at some times, for some people. There is no point to testing them. Any knowledgeable generalist in voc. ed. can give ample examples of situations/individuals which illustrate validity.

   Increased validity can be achieved by:

   (1) Making basic skills more prominent in competency based vocational programs, i.e., objectives, experiences, evaluation, retention, remediation, graduation.

   (2) What voc. ed. does in upgrading/updating programs should likewise incorporate basic skills. It is fact that facility with words, numbers, and people = advancement potential.

   (3) Much of retraining = learning new vocabulary.

2. There is little hope for differentiated staffing in the 80's. There will be less not more. So reliance must be upon regular classroom teachers and vocational teachers. Stadt has developed an evaluation module for Wentling (DAVTE/LDE). See it re how to articulate voc. ed. and regular or remedial teachers' efforts to individualize basic skills training.

   A combination of strategies will be best. The matter of oral communication will be best left where it is, i.e., with the sponsors of vocational student organizations, which are the only vehicles making for major improvements in such skills of clients which actually come to voc. ed. A student-oriented math or language department (can be department of one)

can make major contributions to basic skill improvement. But, vocational teachers have to deal with specific applications, i.e., real, lifelike applications (third step in four-step teaching).

3. Teacher education will fail unless it models after medicine = forget graduate school affiliation; give professional degree only after six or more years out of high school; go competency-based; forget study of education history, philosophy, etc. junk; deal with diagnosis, prescription, treatment, evaluation and differentiated staffing, etc.; induct committed, older people who have proven selves in work and/or baccalaureate degrees.

   Then teacher competencies re basic skills, individualization, special needs, etc., etc. would be business as usual. The inner tube won't take more patches.

4. Yes. Every teacher has to deal with basic skills. They are integral with all manner of learning and a professional obligation. Some states have pre-service requirements re basic skills and other things for all teachers. All we need do is drop so-called ed foundations from B.S. requirement and stick in a "how to teach numbers and language course."

   But (see 3 above) how do we also stick in values, individualization, characteristics of handicapped? Etc.? Etc.?

5. A. Recognize voc. ed. as true member of education family.

   B. Legislate place for voc. ed. in required curriculum = Voc. ed. does consumer ed. for all. Voc. ed. becomes part of basic skills team. All kids have to develop saleable skills in school of they can't demonstrate such skills developed elsewhere. Voc. ed. does work values and job acquisition skills.

C. Fund student organizations because they contribute to oral communications and other basic skill development.

D. Require competency-based programming, inclusive of employment-related basic skills.

E. Fund (heavily) WECEP, Special Needs Coop, and Early School Leaver programs--all inclusive of basic skills and required subjects.

F. Require LEA's to use the Basic Skills/Voc. Ed. evaluation materials which are under development. (Certain additional ones of the LDE materials should be mandatory. Why wait for crises? We knew the value of follow-up long before it was mandated. So why procrastinate? Let's use what we know about plowing and require such practices as articulating so-called academic and vocational education.)

G. Buy and manage a demonstration (residential likely) high school and show the worth of approaches to basic skills development and a wealth of other things voc. ed. professionals profess.

Richard J. Miguel

Basic Skills and Vocational Education
Seminar
March 14, 1981

1. There are certain assumptions associated with vocational education. One of the more prevalent maintains that training in basic skills will enhance one's opportunities in three ways: (1) in completing a vocational education program, (2) in advancing in the workplace, and (3) in being retrained and, therefore, retained during times of economic retrenchment. In your experience what has been the validity of this assumption? If any part of this assumption is invalid, what could be done to increase its validity?

"Training in basic skills" implies that the training, per se, will contribute to or will in a facilitative way effect (1) completion of a vocational education program, (2) advancement in the workplace, and (3) retraining and retention during poor economic conditions. While this assumption is compelling and appearing to be just common sense, evidence to support it would be hard to come by. It would be "easier" to demonstrate that those who have mastered basic skills (in contrast to those who have received training in them) are more likely to succeed in the three areas than those who have not. Training in basic skills for secondary school students also implies to some extent an inability to learn basic skills on the part of those students. This lack of learning ability, if measured, would probably be the basis for failure to succeed in

the three areas mentioned rather than the absence of particular skills. That is, even if basic skills were acquired eventually, the inability to learn would continue to plague them in future vocational development events.

However, assuming that we can demonstrate mastery of basic skills (i.e., attributable to the training) it would seem more likely that such mastery would at the very least enhance completion of a vocational education program--particularly the in-school related instruction (or academic subjects) component. However, the relationship between basic skills (i.e., basic academic skills of reading, writing, and mathematics) and basic skills requirements of jobs is not well understood. Consequently, proving the assumption as it applies to successes on the job as in parts 2 and 3 would be difficult and testing the assumption would probably be a methodological nightmare. The problem posed by the time gap between treatment and the effects of parts 2 and 3 alone would be difficult to surmount.

2. The question of how to introduce basic skills training into vocational education has been asked often. Various intervention strategies have been identified. These strategies range from having a reading specialist solely responsible for the remediation of basic skills deficiencies to having the vocational education teacher attempt to remediate these skill deficiencies in the classroom. Please comment on the likely effectiveness of each of these strategies as well as other intervention strategies with which you are aware.

Having a reading specialist whose sole job is remediation could be effective provided that certain other conditions are met. The reading specialist must also be a specialist in learning disabilities (for those students who are so disabled). Merely setting up a class in basic skills (reading or what have you) will probably not be effective at all. If it didn't work in all those previous grades it's not likely to work in a "remedial" situation. The conditions under which the reading specialist concept is likely to be effective are: (1) individualized instruction, (2) no more than 20 students per week, and (3) articulation with all other voed courses.

Having the voed teachers do the job of basic skills training is very unlikely to work. I am aware of an experiment in a very progressive and affluent community where they decided to "decentralize" the teaching of reading. That is, <u>every</u> teacher was to be a teacher of reading. The consequences were negative. Reading test scores declined and the number of books taken out of school libraries also declined! The conclusion was that whatever is everyone's job becomes no one's job.

3. Each of you has a specific role in vocational education. Given the specific and possibly unique aspect of your role, what do you believe should be done to solve or deal with the basic skills "problems" that vocational education faces?

The concept of "literacy events" is most intriguing. Rather than building a separate basic skills course or infusing basic skills training in all other courses, a promising approach is to plan for literacy events in all aspects of the curriculum especially in community-based learning activities. As students confront the literacy event (e.g., filling out a form, etc.) they are provided instruction "on demand" so as to help them accomplish that literacy event. It seems that the fundamental problem for certain students who have difficulty acquiring basic skills is a persistent and debilitating self-concept as a "nonlearner" of things academic. They seem to almost have a predisposition against the abstractions that basic skills represent and an aversion to the absence of real life contexts (sterility-?-) surrounding the teaching of basic skills. Many vocational education teachers will tell of students who really began to learn once they grasped the meaning of their learning. This fusion of meaning and learning helps vocational students acquire the more positive self-concepts of self as learner. After all, it took years for the schools to convince these kids they were nonlearners. It's amazing that any program can reverse the damage done in earlier grades.

4. In your role as a national expert on basic skills in vocational education you undoubtedly have invaluable information. Please identify any model programs that address basic skills in vocational education. Also, please provide a brief comparison of Illinois with other states in terms of its approach to basic skills in vocational education. Finally, from your perspective, please comment on the importance of basic skills training and attainment in vocational education.

I'm not sure that it still is operating but the Adult Competency Education program in Redwood California is an outstanding program that equips adults with basic skills to facilitate job entry. Joe Cooney is the project director. I am impressed by the Denver Career Education Center. Their occupational programs do seem to do a good job of integrating basic skills into vocational training. Irv Moscowitz used to be the director but now is in a central office position. Huntington Beach, California has an excellent vocational program that stresses basic skills. They have developed a matrix which relates specific skills to various sectors of vocational training. The Berkshire Education Collaborative in Berkshire County, Massachusetts has a most interesting Vocational Intern Program. Lacking funds, several school systems pooled resources to develop a community-based voed program. A teacher meets with an employer to develop a contract which essentially becomes the curriculum. This is a beautiful blending of basic skills and vocational skills.

From my perspective (curriculum theory and design and youth employability-development research), it seems that the renascence of emphasis on basic skills is moving many educators somewhat mindlessly in the direction of the swing of the pendulum of educational policymaking. It is important that projects such as this exist because such changes require careful examination of relevant issues and of the historical context. If decisions regarding medical treatment of children were handled casually, haphazardly, or without sufficient safeguards, we would be incensed. Why should we be any less outraged when educational experimentation (educational treatments executed in the absence of evidence of effectiveness) proceeds merely on someone's say so. Obviously, I'm getting on my soapbox, but I do feel strongly about this point.

Assuming the claim is that vocational education students are hampered in educational and vocational progress because they lack basic skills, what are the appropriate responses? One is being examined by this project, that is, to infuse vocational education with "basic skills training" (I continue to have difficulty with the word "training" used in connection with basic skills). Others are equally as relevant and I'm not sure we should get into them (e.g., ineffectiveness of earlier educational experiences, accuracy or validity of policymakers' assumptions, and the like).

There are prerequisites that should be attended to before tampering with vocational education curricula. As an "outsider" coming to vocational education, it seems to me that of all the forms of educational practice, vocational education is the one most uniquely suited to blending basic skills instruction with what Stratemeyer called "persistent life situations" (in today's vernacular--real life). Havighurst called these events "teachable moments." Good voed teachers recognize them, and at those moments, become basic skills teachers although they might not realize it. Therefore, I would like to see teacher training include training in how to cause learners to be motivated to improve their levels of basic skills. Too often teacher training deals only with the structural or discipline-centered aspects of subject matter. While it is important to know what to teach in basic skills areas when the teachable moments arrive and how to recognize them, it requires considerable skill in creating conditions (curricular activities) to ensure that such instruction happens. Further, I would like to see elementary education return to this approach bringing vocationally related activities to the teaching of basic skills--not career education but, for example, learning to read, measure, write, and speak better by participating in a project to build or fix

something. In this case the vocational activity is the vehicle and stimulus for learning basic skills. I think career ed got this idea backwards and that's why so many teachers rejected the infusion concept!

To summarize my ramblings, I do think that basic skills education is important to vocational education attainment. I would be opposed to basic skills being taught as a separate part of voed because such learning becomes vacuous. If such instruction failed in all the previous school years, why should it work in secondary school? Perhaps some think the students would be ready for it? However, ten years of reading and math. readiness seems excessive! I am also reticent about the idea of merely asking all voed teachers to incorporate basic skills into their existing instruction. This is letting instruction of basic skills to chance. Past experience says it is not likely to happen. Being a compromiser, I'll choose a middle road here and it begins with training teachers in both basic skills and vocational education. It also means research to understand the relationship between basic skills instruction via voed and pervasive basic skill requirements of jobs that youths are likely to enter. Lastly, it means innovation in voed curricular activities that generate genuine learner needs for mastering basic skills and that make learning of those skills purposeful.

Optional Question

5. Given that one of the major outcomes of this Seminar will be recommendations for policy to the State Office concerning the method of treating Basic Skills Training in Vocational Education, do you have recommendations that you would like to state at this time?

   Recommendations:

BASIC SKILLS AND VOCATIONAL EDUCATION

A response to selected questions prepared by the Research and Development Center, Roosevelt University, by: Robert D. Rose, Dean of Instruction, Richland Community College, Decatur, Illinois - May 14, 1981.

Question 1

There are certain assumptions associated with vocational education. One of the more prevalent maintains that training in basic skills will enhance one's opportunities in three ways; (1) in completing a vocational education program, (2) in advancing in the work place and (3) in being retrained and therefore retained during times of economic retrenchment. In your experience what has been the validity of this assumption? If any part of this assumption is invalid, what could be done to increase its validity?

Response:

My immediate response to the above question concerning the validity of basic skills enhancing one's vocational opportunities, would be an emphatic "yes." However, this also would assume a control upon diverse and complex variables that exist as barriers to employment. These variables would include such things as economic climate and the resultant laws of supply and demand and also include those that more specifically affect the individual and which effectively have prevented successful employment. A partial listing of these would be such things as lack of work experience, lack of education, lack of skill, discrimination as it would relate to racial, age, sex, and religion, communications problems such as reading, language and the speaking of English. Other barriers that could be included would be the emotional/personal problems, social and inter-personal conflicts, financial problems, legal problems, and general barriers such as child care, health, and transportation problems. Therefore, maintaining that training in basic skills will enhance one's vocational opportunities might be analogous to raising the level of Lake Michigan by throwing a bucket of water into it.

To be quite candid, as I read and re-read this question, I could not help but be drawn back to the review of selected literature provided by Roosevelt University, particularly to the sections "Can schools have any significant impact on youth unemployment" and "Do employers attribute very much to credentials." These sections point out the complexities of the market place and also help to highlight the results of a recently completed Richland Community College Needs Assessment in which an overwhelming number of small employers responded that vocational skill was not as important to them as were the skills of reading, writing, computation, and getting along with others, and usually coupled to this response an additional comment concerning the desire for employees with a positive attitude toward work.

In responding to this question, my thoughts almost rush to the conclusion that unless a student has reached a fairly high level of vocational maturity, the attainment of basic skills through general education or basic skills education or training (or whatever you want to call it) will have more impact on employment than will vocational skill training.

Question 2

The question of how to introduce basic skills training into vocational education has been asked often. Various intervention strategies have been identified. These strategies range from having a reading specialist solely responsible for the remediation of basic skills deficiencies to having the vocational education teacher attempt to remediate these skill deficiencies in the classroom. Please comment on the likely effectiveness of each of these strategies as well as other intervention strategies with which you are aware.

Response

Of the various intervention strategies identified, the most effective in terms of student acceptance would be that of having the vocational teacher teach basic skills as an integral part of the subject matter. Experiences with the MDTA and CETA student would seem to support this conclusion.

However, this assumes much as it relates to the skills, education, and acceptance of the notion on the part of the vocational educator. The least effective intervention strategy in my view would be that of a basic skills specialist being wholly responsible for the remediation of basic skills deficiencies, particularly if the teaching methods and environment are considered to be "traditional" while attempting to reach the "non-traditional" student. Again, my conclusion is biased because of prior experiences in teaching designing, and evaluating courses and programs for the MDTA and CETA student. A common strategy which could be mentioned would be one of articulation between the vocational teacher and the basic skills teacher or subject matter teacher. This could also be an effective method given the ability of the two to work together in planning basic skills curriculum and each being aware of what the other is doing so that there is constant student re-enforcement that basic skills have value and will, indeed, enhance vocational opportunities.

Another typical intervention strategy and one that was pointed out in the review of literature is that of offering pre-vocational remedial courses in conjunction with vocational programs. At my institution, a community college, this is a typical pattern for the ESL student.

In summary, my limited experience has shown that the various methods of teaching basic skills can be compared to organizational design for public or private enterprise activities: anyone of them will work if you have the right people in place.

Question 3

Each of you has a specific role in vocational education. Given the specific and possibly unique aspect of your role, what do you believe should be done to solve or deal with the basic skills "problems" that vocational education faces?

Response

My response to this question is flavored somewhat by frustration, and that frustration has as a basis a nagging belief that our schools are not doing their job. If the elementary schools, the middle schools, and even the lower years of the high school were effective, then we in vocational education (or, in fact, we in all of education) would not be having this constant debate over basic skills problems. My first vocational teaching job was in 1966. Also, interestingly, my first contact with the debate on how best to determine basic skills instruction was in 1966. (I was teaching in an MDTA skill center and my students would have to leave my drafting classroom for one hour a day of basic skills instruction and they hated every minute of it. As a result, I initiated a small program of basic skills instruction delivered in the drafting classroom.)

If I had the power to intervene and to have impact on the educational processes, I would do so at the K-8 level. This is where the debate on intervention strategies for improvement of basic skills should be waged. In my daily work as a Dean of Instruction and before that as a Director of Vocational Education, I have had occasion to discuss with many employers the deficiencies of basic reading, writing, and computational skills of today's high school graduates. In fact, the GED is being viewed by some employers in my community as a more worthwhile measure of basic skill attainment than is a high school diploma mainly because people have to take a test to get the GED.

Community colleges also tend to overlook the necessity for validating basic

skills. For it is possible for a student to obtain a vocational certificate in a wide range of vocational areas without taking specifically required courses in writing or math. It is assumed that the college age students will bring the necessary basic skills with them. However, when discussing student achievement with instructors in these certificate programs, I find that at my institution our instructors are spending an inordinate amount of time on basic skills instruction.

In essence, the problem rests not with vocational education, but somehow we are agreeing to pick up the pieces. This is inappropriate as a long-range solution.

Question 4

There are those who contend that one proven way to improve basic skills training in vocational education is to include within the teacher training curriculum sufficient course work that would enable vocational education college graduates to teach basic skills.

A) Is this, in your opinion, an appropriate strategy and why? (You may choose to list possible advantages and disadvantages.)

B) If appropriate, how could this strategy be best accomplished?

Response

It would be best to let the teacher education institutions debate this issue, particularly in light of the fact that many vocational educators are choosing private sector employment. Therefore, it is my opinion that it is unworkable to expect vocational teacher trainees to not only be educated as competent vocational teachers in their chosen field, but to also be educated as highly competent basic skills specialists.

Another reason that this would appear to be unworkable is that many institutions search for and attempt to employ vocational teachers with private

sector experience. As a result, many of our vocational staff have subject matter degrees or training outside the field of education (apprenticeship, accountancy, engineering, industrial technology, the MBA, etc.).

In essence, preparing vocational teachers to also be competent basic skills specialists attacks the wrong end of the problem. As I have said before, basic skills instruction should be effective at the lower grades. Regardless of strategy or teaching methodology used, vocational education should not be required to assume this responsibility as a long-term solution to the training of an effective work force. All of education must accept its share of the solution. To accomplish this, there may need to be national goal setting and legislative action.

BASIC SKILLS IN VOCATIONAL EDUCATION SEMINAR

Roosevelt University
Chicago, Illinois

May 14, 1981

Michael R. Crowe
Research Specialist
The National Center for Research in Vocational Education
The Ohio State University
Columbus, Ohio

Michael R. Crowe
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QUESTION #1:

There are certain assumptions associated with vocational education. One of the more prevalent maintains that training in basic skills will enhance one's opportunities in three ways: (1) in completing a vocational education program, (2) in advancing in the work place, and (3) in being retrained and therefore retained during times of economic retrenchment. In your experience what has been the validity of this assumption? If any part of this assumption is invalid, what could be done to increase its validity?

NOTES:

From my perspective, the validity of an assumption must begin with an analysis of the "who" referred to in the assumption. In this case, the who are youth (aged 16-19) participating in secondary vocational education programs. They have entered the vocational education program under varying circumstances (from a personal and real need to the coercion of teachers, counselors, and parents) and their work experience is generally limited to the secondary job market which provides a limited and often biased view of the work place. Also, not to be overlooked, is their diversity on such factors as SES, ability, and location (urban, rural, and suburban).

While basic skills training (BST) may enhance the youth's opportunities for completing a vocational education program, I doubt that training at this early stage of their working lives can be directly attributed to advancing in the work place or being retained and retrained in periods of economic down swings. Given the diversity of youth in vocational education programs and current research which suggests positive relationships between jobs (subsequent employment and wages) and individual characteristics of race, sex, age, family income, and years of educational attainment with family income representing one of the strongest correlates, the assumption that BST

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at ages 16-19 will contribute substantially to one's opportunities for advancement and retraining in later years appears somewhat optimistic. Youth with BST compared to those without BST may be in a better position of obtaining initial, related employment, but the scope and extent to which this secondary training impacts in later years has not been empirically documented; and, in my opinion, given the state of the art of impact studies and evaluations, it is not likely to be demonstrated in the immediate future.

This does not, however, deny the importance of BST in secondary vocational education programs, for without a knowledge of basic skills, youth will have little chance of survival in the labor force that is increasingly demanding greater and more complex work skills. The assumption of advancement and retraining may be more a matter of an individual's specific circumstances and timing (e.g., type of industry employed in, seniority on job) than a function of BST a youth receives at ages 16-19.

In her paper on Vocational Education and the Work Establishment of Youth, Sue Berryman notes that in theory, factors which affect employers' selection and hiring could represent information that they use to project an applicant's value as an employee (e.g., training costs, job performance, etc.). A possible way employers may assess an employee's value is to examine their characteristics of educational credentials, academic skills, job skills, work habits, and previous work experience. Thus, it is possible that proficiency in basic skills may be a signal for other types of employment characteristics desired by employers. For example, students who are competent in basic skill areas are also likely to be successful in new

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learning tasks or training. Hence, although basic skill proficiencies may be more strongly associated with school-related outcomes, they may also be associated with initial employment-related outcomes. Thus, it is the realistic employment-related outcomes from BST that need to be explicitly stated as part of any assumption for vocational education.

In summary, it is my opinion that the relationship assumed between BST in secondary vocational education programs and completion of vocational education programs is reasonable (and should be expanded to include such things as providing an alternative process of learning), while the relationship to advancement and retraining is tenuous and increases expectations that are not likely to be empirically demonstrated.

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QUESTION #2:

The question of how to introduce basic skills training into vocational education has been asked often. Various intervention strategies have been identified. These strategies range from having a reading specialist solely responsible for the remediation of basic skills deficiencies to having the vocational education teacher attempt to remediate these skill deficiencies in the classroom. Please comment on the likely effectiveness of each of these strategies as well as other intervention strategies with which you are aware.

NOTES:

In my opinion, it seems that before an intervention strategy on introducing basic skills training into vocational education programs can be identified, it is first necessary to have a working definition of what is meant by basic skills and basic skills training. While basic skills to the educator often means reading, writing, listening, math, speaking, etc., basic skills to an employer can also include other skills, which they consider basic to productivity in the work place, such as work values and attitudes (getting along with workers, showing up on time, etc.), specific technical skills related to performance on the job, and knowledge of the world of work.

Other concepts or terms that overlap with the notion of basic skills are competencies, literacy, and transferable skills. Each has specific meanings depending upon the researchers, but appear to be interwoven with the overall concept of basic skills. If learning basic skills means learning math, for example, to a certain criterion or level, then the addition of such concepts as competencies, literacy, or transferable skills enhances the potential meaning of basic skills mastery to include such abilities as math-to-do application, math-to-learn, or math-to-assess.

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Given my own research at the National Center, the issue is not only the "what" of basic skills that is taught, but the context or environment in which it is learned. In a classroom setting, the sequence and organization of concepts are under the control of a teacher, trained in a discipline area, and under the influence of instructional textbooks that attempt to present knowledge in what appears to be a logical and coherent manner. This is not the process of learning in a work setting, where students are required to pick and choose concepts in ways that are useful for solving the problems related to the work place. The problems are not organized in logical ways and, therefore, require students to generate alternative strategies for examining applications which, in turn, results in solutions not required in a classroom setting. Thus learning in the work place seems to require students to process information from many different sources to solve problems and they appear to be more proactive in their learning tasks. Our research suggests that learning and retention of math concepts may be influenced by learning which occurs in the the work place. It would seem that learning at the work site provides students with an opportunity to practice math-to-do application tasks.

Before discussing intervention strategies, I would like to raise the issue of assessment of intervention strategies for BST. This is not a new issue, but because assessment should be tied to intervention strategies and because of the nature of the tests available to measure student achievement, I feel it deserves an explanation. Currently, the two common approaches to measuring basic skills performance is the standardized achievement test and minimum competency test (MCT). Weaknesses of standardized tests include the

narrowness of skills to be measured, the different definitions associated with basic skills from test to test, scores reported in grade equivalents, and scores that are norm referenced. MCT because of their recent development and use have yet to be fully validated with regards to either their relevancy of content or their criteria levels. In any assessment strategy, other methods in addition to tests, should be included. In other words, if BST is systematically introduced into vocational education programs, specify up-front appropriate alternative assessment techniques (including the comparison groups).

With regards to intervention strategies that could be effective for delivering BST in vocational education programs, the following strategies are offered: (1) individualize the approach; (2) the curriculum should be sensitive to the multidimensional nature of basic skills; (3) to the extent possible, basic skill training should occur at the work site (e.g., co-op); and (4) the students should be given responsibility for planning, carrying out, and evaluating (feedback) their learning and performance in conjunction with the teacher.

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QUESTION #3:

Each of you has a specific role in vocational education. Given the specific and possibly unique aspect of your role, what do you believe should be done to solve or deal with the basic skills "problems" that vocational education faces?

NOTES:

As a researcher in vocational education, my response is, of course, that research is needed to understand the complexity and tradeoffs of BST. Both basic and applied research is required. Basic research is needed for understanding the structure of curriculum and its relation to the attainment of basic skills required for work place performance. For example, what is the distribution of basic skills across occupations and occupational areas? Can students learn basic skills at the same time as they learn job skills? Since the context in which basic skills are learned and applied may affect what is learned and remembered, the interaction of the learner's performance in the work place and classroom should be investigated. Is it the "what" of basic skills that requires revision or is it the process of delivering basic skills that requires revision, or both? Applied research is required where the researcher, practitioner, and employer analyze the work place requirements, not only for basic skills but also for motivational skills, so that new programs can be developed incrementally that meet the needs of youth. The new so-called "high-technology jobs" should be analyzed to determine, if in fact, new skills are required or whether a refocus of current skills will suffice. New assessment techniques to document students' performance and ways to convey this information usefully to employers also is required.

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QUESTION #4:

In your role as a national expert on basic skills in vocational education you undoubtedly have invaluable information. Please identify any model programs that address basic skills in vocational education. Also, please provide a brief comparison of Illinois with other states in terms of its approach to basic skills in vocational education. Finally, from your perspective, please comment on the importance of basic skills training and attainment in vocational education.

NOTES:

For this question I would like to discuss three models that could have implications for BST in vocational education programs and a process used in CETA for documenting youth's experience. The first model is Experience-based Career Education (EBCE). Although this program is primarily for career development, the underlying structure (not unlike co-op) has the potential of delivering BST in the context of the work place. Although this model stresses academic concepts to be learned in the work place, it could also specify basic skills. The use of learning contracts provides the students with the knowledge to-be-learned but also provides for the flexibility of integrating or linking the academic concepts to tasks in the work place.

A second model or program is Georgia's Coordinated Vocational Academic Education Program (CVAE). The program was designed for low-achieving, disadvantaged students who were unable to succeed in regular classrooms. Their approach to reinforcing basic skills emphasizes the integration of special academic and vocational curricula in a single program. The goal of these programs is the preparation of students for regular classrooms and/or employment. The program, operated out of the Office of the State Supervisor of Special Needs Programs:

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> ...offers vocational education for underachieving or alienated youth whose behavior indicates that they will probably not complete high school, or that they will continue in a pattern of underachievement unless their special needs are recognized. The program is financed by vocational funds for disadvantaged and special needs students.
>
> CVAE is a year-long course for students in grades nine through twelve. The curriculum focuses on a combination of (1) competencies necessary for occupational entry, adjustment and advancement in a field of vocational education and (2) special emphasis on remediating individual deficiencies in reading, language and math that are impeding the student's progress in the regular vocational classroom. In addition the state prepared materials covering life adjustment and career-seeking skills.
>
> Today CVAE offers 157 programs across the state with an enrollment of approximately 12,500 disadvantaged students.
>
> Voc Ed, 1979, p. 40

A third model is one designed to provide basic skills instruction in support of vocational courses. These programs typically use vocationally-relevant materials or subject matter to teach basic skills, e.g., Business Math, Vocational English. This approach serves a vocational student population. Although regular classroom teachers generally provide the actual classroom instruction, the curriculum is developed through the joint efforts of vocational and regular teachers.

An example of this approach is the Communication Skills Program in West Linn, Oregon (Schuberg and Canon, 1972). "This was an exemplary project aimed to extend a program designed to help high school students with industrial occupational goals achieve practical communication skills necessary to efficient employment entry" (p. 1).

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> The original developmental planning was undertaken by four industrial teachers, two language arts teachers, chairman of English, and the director of vocational education. The language arts teachers conferenced [sic] a minimum of four hours in each of the four industrial curriculum areas observing operation of each machine or piece of equipment, viewing the course content, surveying the occupational publications for each field, reviewing the cluster communication skills as suggested in the state guide, and interrogating the occupationally competent industrial instructors about the nature of communication processes in the respective occupational areas...
>
> Each major category was subdivided into specific communication skills. For each specific skill multiple job sheets were developed to utilize the differential skills. The language arts personnel subdivided the established communication categories into differential skills. Job sheets were developed for each differentiated skill. As the anguage arts teachers developed job sheets, the vocational instructors "plugged in" content for their respective occupational field.
>
> p. 1

A process used by some CETA programs to document youth's experience approach to goal setting and documenting youth achievement in employment and training programs with the expectation that youth who leave the program have the required skills for employment in the local labor market. The Syracuse Research Corporation has issued a preliminary report (1981) on Benchmarking and defined the process as "levels of achievement which mark progress towards, or actual attainment of, those standards of performance which are perceived as necessary to obtaining and retaihing unsubsidized employment." Thus the process involves choosing individualized benchmarks, planning appropriate training, assessing youths' competencies against the benchmarks,

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and recording and communicating the benchmark achievements to potential employers.

The Consolidated Youth Employment Programs (CYEP) is addressing the issue and are benchmarking in four areas: pre-employment, work maturity, educational achievement, and occupational skills. The standards for the benchmarking system are being developed locally with the inputs of community (employers, CBO's). According to SRC, benchmarking (1) is seen as a client placement tool which involves employers and documents client achievement so employers will have information to make hiring decisions, (2) can be used as a program management tool, (3) can serve as a way to measure program effectiveness, and (4) is believed to motivate clients. To date, benchmarking varies from taking of attendance to elaborate assessments of clients. It would seem that vocational education with its built-in advisory councils and reporting systems could make use of such a system if it were found to be workable.

Finally, from my perspective BST for vocational education is not only important, but should be given a high priority at all levels of vocational education programs and administration. As a word of caution, however, BST per se is not new for vocational education; what appears to be new is (1) the context of the problem, which seems to be to help <u>all</u> youth maximize training for the purpose of gainful and productive employment in times of swiftly changing occupational requirements; and (2) redefinition and focusing on the role of basic skills training in relationship to the needs and concerns of employers.

BASIC SKILLS AND VOCATIONAL EDUCATION

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Question 4

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A) Is this, in your opinion, an appropriate strategy and why? (You may choose to list possible advantages and disadvantages.)

B) If appropriate, how could this strategy be best accomplished?

Response

It would be best to let the teacher education institutions debate this issue, particularly in light of the fact that many vocational educators are choosing private sector employment. Therefore, it is my opinion that it is unworkable to expect vocational teacher trainees to not only be educated as competent vocational teachers in their chosen field, but to also be educated as highly competent basic skills specialists.

Another reason that this would appear to be unworkable is that many institutions search for and attempt to employ vocational teachers with private

sector experience. As a result, many of our vocational staff have subject matter degrees or training outside the field of education (apprenticeship, accountancy, engineering, industrial technology, the MBA, etc.).

In essence, preparing vocational teachers to also be competent basic skills specialists attacks the wrong end of the problem. As I have said before, basic skills instruction should be effective at the lower grades. Regardless of strategy or teaching methodology used, vocational education should not be required to assume this responsibility as a long-term solution to the training of an effective work force. All of education must accept its share of the solution. To accomplish this, there may need to be national goal setting and legislative action.

Accomplishments

1. Objective: To conduct a comprehensive literature review that addresses basic skills in vocational education.

   Accomplishment: A comprehensive review of the literature has been completed.

2. Objective: To conduct a content analysis of the curricula requirements in vocational education regarding basic skills in vocational education.

   Accomplishment: A preliminary content analysis of curricula in the various programs in vocational education revealed that there were no systematic requirements regarding basic skills across vocational education programs.

3. Objective: To sponsor a conference composed of experts in the field of basic skills in vocational education.

   Accomplishment: A conference titled "Basic Skills in Vocational Education Conference," was held on May 14, 1981 at Roosevelt University in Chicago. For a list of Conference participants, please see Conference Summary.

4. Objective: To work with DAVTE Staff and experts to develop policy recommendations for vocational education programs in Illinois.

   Accomplishment: Project Staff in conjunction with DAVTE staff content analyzed Conference results and produced a tentative list of policy recommendations. (Please see pages 104-108 of Continuation Proposal in next section for a summary.)

Major Activities and Events

The Project Staff had developed a Management Information Syste, (MIS) that would be used to address project objectives, tasks, evaluation and documentation criteria. However, it was determined by both DAVTE and Project Staff that a change in MIS objectives might be more profitable.

It was decided that instead of completing Objective 3 (i.e. to design and distribute a survey of 10% of the vocational education school programs in Illinois to get information regarding current practices in vocational and general education and prepare a state of the art paper), perhaps it would be more beneficial to sponsor a conference. Accordingly, Objective 3 was changed to read: To sponsor a conference of experts in the field of basic skills in vocational education. A revised MIS that reflects these changes follows this narrative.

A conference titled "Basic Skills in Vocational Education," was held at Roosevelt University, May 14, 1981. A summary of this conference can be found in the section of this final report titled "Conference/Workshop Summary."

In addition to the conference held, a continuation proposal regarding basic skills in vocational education was completed in response to the request from DAVTE. This continuation proposal explains in greater detail certain aspects that are only briefly discussed in this final report. A copy of the continuation proposal follows the revised MIS.

M.I.S.: D.A.V.T.E. Project - Basic Skills

(Revised, 3/17/80)

Objectives	Task and/or Activity	Product/Method of Evaluation	Staff Person(s) Responsible	Projected Completion Date	Completion Date
1) To conduct comprehensive Structure Review regarding basic and academic reqirements in Vocational Education Programs	1) Conduct computer search 2) Investigate DAVTE Summer 3) Locate studies already completed	Written literature review	C. Orear Janice Weiss	February 28, 1981	March 12, 1981
1A) To present DEM for the Formative evaluation component of the proposal	1) Identify basic skills that ideally should be learned regarding program requirements 2) Develop model for comparing above with real accomplishments at the local level	Brief description of DEM, for use in conducting formative evaluation of projects	George Olson	February 28, 1981	Delayed indefinitely based upon lack of specificity of structure found concerning basic skills curriculum guidelines
2) Complete content analysis of the five core vocational program requirements and the minimum academic requirements for the basic skills	· Gather list of requirements regarding skills in five vocational areas and general requirements of basic skills · Produce discrepancy analysis between Core Vocational Education requirements in the five core areas and minimum academic requirements	·Vocational Education state requirements ·Individual Vocational High Schools Curriculum Guides	Bennett/Orear	January 30, 1981	February 30, 1981 Discrepancy analysis replaced by report of current status of basic skills training

Objective	Task and/or Activity	Product/Method of Evaluation	Staff Person(s) Responsible	Projected Completion Date	Completion Date
2)	·Collect and summarize local interview data concerning identification and treatment of basic skill deficiencies in vocational education students	Report of results	Orear	March 30, 1981	March 30, 1981
	·Construct questions for inclusion in questionnaire to pilot sample	Questions	Orear/Bennett	March 30, 1981	March 30, 1981
3) Plan and carry out one day seminar involving invited state and national experts in vocational education	·Select and invite experts	List and confirm attendance	Schwartz/Olson	April 15, 1981	April 15, 1981
	·Prepare pre-seminar questions for experts to respond to in writing before attending conference	Correspondence with questions; written responses (bring to conference)	Bennett/Olson	April 15, 1981	April 15, 1981
	·Plan conference collboratively with DAVTE staff	Agenda and Explanation, evaluation strategy	DAVTE/RU Staff	April 1, 1981	April 1, 1981
	·Conduct conference, evaluate results, and produce recommendations for state staff concerning needed action and policy guiding basic skills training in vocational education	Evaluation results	DAVTE/RU Staff	May 14, 1981	May 14, 1981
		Policy recommendations	Bennett/Olson	July 30, 1981 (In final report)	July 30, 1981 (In final report)
4) Complete final report of project activities and findings	·Produce proposal for further action	Proposal for 1981-82	Bennett/Olson	June 30, 1981	June 30, 1981
	·Write report	Report	Bennett/Olson	July 30, 1981	July 30, 1981

SECTION 5

PROPOSAL NARRATIVE

A Determination of Best Practice
for Incorporating Basic Skills
Training in Vocational Education
Programs in Illinois

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A Determination of Best Practices for Incorporating Basic Skills Training in Vocational Education Programs in Illinois

5.1 Introduction and Rationale

The purpose of this proposed project is to conduct a comprehensive study to determine the best practices for incorporating basic skills training in vocational education programs in Illinois. This is a continuation of a previous proposal in which various methods to determine and identify ideal practices existing throughout the state to serve as model programs were used. During the initial phase of this project, a comprehensive review of selected literature was conducted that addressed three important issues in vocational education. They were

1. Can schools have any significant impact on youth employment?
2. What meaning do employers attribute to educational credentials?
3. What is the current status of basic skills training in vocational education programs?

A review of selected literature on basic skills and vocational education follows this introduction.

In addition to the review of the literature, a one day conference titled "Basic Skills in Vocational Education" was held at Roosevelt University May 14, 1981. At this conference eleven individuals from various role groups (administrator, practitioner, etc.) were invited to share their views on how best to address the needs of vocational education students who need basic skills remediation. A summary of the conference findings and recommendations follows the literature review.

The concern for basic skills and vocational education is not new. Nor is this concern limited to vocational education. Questions

concerning the communication skills (reading, writing and comprehension) and math skills (computation and problem solving) of high school students have been in the forefront of problem areas in American Education since the question of "Why Johnnie Can't Read" was raised. Attention was focused on the need for basic skills in vocational education during the 1960's as concern with high unemployment among minority groups rose. The Vocational Amendments of 1968 and the Youth Act of 1980 further demonstrated the concern for the growing lack of communication and math skills of young people in vocational education programs.

John Washburn, Manager of DAVTE of Illinois State Board of Education states his concern for the status of basic skills in vocational education programs in Illinois. He concludes that "Illinois has not aggressively attacked the basic skills problem. It's well recognized as a concern among educators and employers." However, he cautions that "we need to make sure that we can impact on the problem." The need for basic skills in vocational education is essential. The best way to achieve this is problematic.

Conference Results

The purpose of the conference held May 14, 1981 at Roosevelt University was to further define and articulate the issue of basic skills training in vocational education and to generate policy recommendations that could be given to the Illinois State Board of Education for consideration. Eleven experts in the field across a number of role groups (administrators, practitioners, higher education, etc.) were invited to the conference. A list of conference participants is included in the Appendix. Each participant was requested to respond in writing to a set of four questions the last of which pertained directly to his or her role group reference.

After the conference a content analysis of their responses was conducted and a number of similarities were found. There was general agreement about the need for competency based instruction and the need to individualize instruction. However, there was no consensus about the method that should be used to attempt to remediate vocational education students' deficiencies in basic skills.

The responses of the seminar participants strongly expressed the need for a continuous method of evaluating student performance. The instructional method most often mentioned as having the greatest potential for achieving this end was competency based instruction. One conference participant regards competency based instruction as "crucial to the early identification and remediation of students who need special attention."* Still another respondent concludes that "limiting competency based instruction to the secondary vocational education programs is only half the

*To protect annonymity names are not included in this proposal.

battle. The need for competency based instruction goes beyond the 9th or 10th grades. There is a need at the Kindergarten level. We must strive to make competency based instruction a K-12 commitment."

There was the same degree of consensus about the need to individualize instruction based on competencies needed to meet specific course objectives. One respondent places the importance of individualizing instruction as critical to the early identification of those students who need further basic skills training. He states that "we must establish an Individual Vocational Plan (IVP) for all students and utilize it to evaluate and assess the progress of each student."

The conference participants reached overwhelming consensus about 1) the need to improve basic skills attainment in vocational education; 2) the need to individualize instruction; and 3) the need for competency based instruction. There was not consensus as to how best to go about satisfying these needs.

There were basically three remediation intervention strategies that were identified and suggested to be used in the remediation of those students with special needs in basic skills. They were:

1. Infusion
2. Separation
3. Collaboration

These three intervention strategies are further explained below.

1. Infusion: Those who favor the infusion method believe that all vocational education teachers should also be teachers of basic skills. They rationalize that "who better can adapt the importance and relevance of basic skills to vocational skills than the vocational education teachers themselves. In order to accomplish this, they suggest both a

pre-service curriculum change where future vocational education teachers would be equipped with the necessary skills to infuse basic skills instruction along with a series of in-service sessions which would equip those experienced vocational education teachers with the necessary skills to teach basic skills.

However, there are those who feel that this intervention strategy is inappropriate. One respondent stated that "I don't believe a vocational instructor can be expected to incorporate basic skills instruction into an already cramped curriculum."

2. Separation: This intervention strategy requires a specialist (in reading for example) whose sole responsibility is to attempt to remediate all students with special needs in the area of basic skills. This separation method relieves the vocational education teacher from any and all responsibility for the instruction of basic skills training.

The critics of this strategy counter with two basic points. They contend that 1) There is probably more basic skills instruction taking place in vocational programs than one might suspect. and 2) The task for instruction of basic skills is no one person's responsibility but everyone's responsibility. Finally, one respondent states that, "The least effective intervention strategy would be that of a basic skills specialist wholly responsible for the remediation of basic skills deficiencies, particularly if the teaching methods and environment are considered to be "traditional" while attempting to reach the "non-traditional" student."

3. Collaboration: The third strategy is based on collaboration or a team approach to remediating basic skills deficiencies. In this approach there would be a closer articulation of individual student needs between

vocational teacher, basic skills specialist and subject matter teacher. This collaboration or linkage as it is often termed was viewed by most conference attendants as the most effective and efficient way to approach remediation of basic skills. A few respondents outlined the benefits of this linkage approach. One respondent stated that

> "At the secondary school level, it is essential that lines of communication between departments in secondary schools be open to insure that proper emphasis is given to the total development of the learner, further insuring that the academic instructors and vocational instructors work as a team to insure that the theoretical aspects of instruction which are carried on in the classroom coordinate with the hands-on practices of the vocational lab. For example, the physics teacher teaches Archimedes' Principle, the vocational teacher teaches the application of that principle. If the physics teacher could relate the instruction to what is going on in the vocational lab, and the vocational teacher could relate the instruction of the Archimedes' Principle to the physics program, the student would benefit from the positive reinforcement."

Another respondent places the principal in the central position of establishing and maintaining a climate where this kind of interaction is possible. Still another respondent extends the linkage concept beyond secondary school to include the "linkage of academic concepts to tasks in the workplace."

However, there are those who feel that the sharing of the responsibility for remediation is not the most effective strategy. He concludes that "whatever is everyone's job becomes no one's job."

Clearly, the available intervention strategies require further examination and analysis before one or the other is viewed as having the greatest potential for addressing those students in vocational education with basic skills deficiencies.

These concerns were the most prominent but they were by no means the only concerns expressed by the seminar participants. One final

point of agreement was that no matter what intervention strategy is adopted, there is a need to tackle the problem of the placement of basic skills in vocational education in a thorough and methodical manner.

In the following sections of this proposal, a procedure for tackling the problem of the role of basic skills in vocational education is outlined. This procedure involves the use of a five phase model (McCage) which addresses in a comprehensive manner complex educational issues such as the examination and delineation of best practices and model program development. The role and issue of basic skills in vocational education is one which requires thorough analysis due to its potential for widespread policy implications. In the next section specific objectives and activities for this proposed project period are described and delineated.

5.2 Objectives

The objectives for this continuation naturally build upon the work completed during the previous 1980-81 project. While the first year project attempted to determine the nature of the basic skills problem and the current status with basic skills training in vocational programs, this continuation effort will attempt to utilize that information to formulate a model of basic skills training that will best accomodate the varied interests and concerns of the individuals and groups affected by such training efforts.

The first year efforts point out, indeed, that a significant problem does exist with persons who seek employment, but who do not possess adequate basic skills and employability (survival) skills applicable to the work environment they will enter. The model that will be developed will attempt to account for the complexity of concerns and issues raised in the First year project activities as well as the additional information gathered this second year concerning "model" approaches and best practices.

The following objectives and activities spell out an approach that will integrate, compare and contrast the relevant data collected and to be collected from relevant sources. The primary outcome for this project is not, therefore, a one and five year plan for incorporating basic skills training in vocational programs in Illinois. The primary outcome is instead a carefully thought model program for the future of basic skill training in vocational education. The formulation process will account for a wide variety of significant variables, e.g. the concerns and advice expressed by experts in the field, views of state staff, opinions and concerns of practitioners in

existing programs, and reports of successful programs nationally and locally. The goal is to present an ideal to strive towards, not in the unrealizable philosophical sense, but an achievable ideal, one that embodies the most accurate information and most knowledgeable sources concerning basic skills training in vocational education today. The next step would logically be the development of a plan for achieving part or all of the "model" in programs locally, perhaps adressed in the traditional one and five year approach.

Given the complexity of what first appeared to be a rather simple and straightforward problem, this second stage analysis is extremely important to the production of a plan for implementation that has some reasonable chance for success. The following, then are objectives for this second stage analysis.

1) To gather additional data needed to fully describe the current status of basic skills training in vocational education programs both nationally and in Illinois.

2) To analyze these data in ways that will account for the varied interests and concerns of those affected by this training and provide the necessary information for the formulation of a model program of basic skills training in vocational education.

3) To formulate a model approach for the incorporation of basic skills training in vocational education programs in Illinois.

4) To produce a technical report describing project activities and providing recommendations to the State staff for the development of a statewide plan for incorporating basic skills training in vocational education programs in Illinois.

The outcomes and timeframe for completion of the objectives and activities are included in the management information system that follows. The population targeted for the project are those experts and practitioners who can contribute information concerning their knowledge and/or experiences with basic skills training as part of vocational programs

in Illinois. These are also referred to in the activities statements of the following plan.

Management Information System

Objective #1: To gather additional data needed to fully describe the current status of basic skills training in vocational education programs both nationally and in Illinois.

Activities	Date of Completion	Staff Responsible	Product/Outcome
1.1 Update the literature review in order to assess the extent to which basic skills training is being employed by vocational education programs, the methods being used, the extent of success and kinds of materials being used.	September 30, 1981	Director	Updated Review
1.2 From the Basic Skills Seminar data, generate a list of desireable characteristics for basic skills training programs for the purpose of comparing these characteristics to those identified in the literature update and other program assessment activities.	September 15, 1981	Director	List of characteristics inclusive of both data sources
1.3 Conduct phone survey to experts in the field and persons they identify as reliable information sources for the purpose of obtaining their opinions concerning the need for basic skills training, how such training should be conducted if needed, and the pitfalls and idiosyncratic aspects of such programs. Obtain opinion as to the importance of the "desireable" characteristics identified in the Basic Skills seminar for training programs; ask respondents to add their views concerning what is important. Ask experts to identify sites they know of that are using basic skills training as part of vocational education, ones in particular that they believe are successful programs.	November 30, 1981	Assistant Director Director	Data Summary List of sites
1.4 Survey vocational education programs that actively engage in basic skills training in order to identify successful practices being employed.	December 20, 1981	Program Development Specialist	

Management Information System

Objective #2: To analyze data collected in ways that will A) account for the varied interests and concerns of those affected by basic skills training and B) provide the necessary information for the formulation of a model program of basic skills training in vocational education.

Activities	Date of Completion	Staff Responsible	Product/Outcome
2.1 Divide all data collected into the following categories: stated needs identified by experts, practitioners and literature update; successful practices identified by survey and phone respondents, and potential sites nationally and locally where successful basic skills-vocational education programs are operating.	January 30, 1982	Director	Summary of data collected according to each category surveyed.
2.2 Identify similarities and differences among stated needs and current practices in place in current programs; develop preliminary set of best practices from integration of these data.	February 15, 1982	Assistant Director	Preliminary list of best practices.
2.3 Identify set of recommended considerations and practices not presently incorporated in existing exemplary programs of basic skills training.	March 1, 1982	Director Program Development Specialist	Recommendations
2.3 Identify sites for potential site visits to validate and/or compare findings of data analyses.	March 15, 1982	Program Development Specialist	List of Sites

Management Information System

Objective #3: To formulate a model approach for the incorporation of Basic Skills training in vocational education programs in Illinois.

Activities	Date of Completion	Staff Responsible	Product/Outcome
3.1 Describe an ideal program of basic skills training in vocational education that incorporates the best practices as identified in previous analyses; include suggestions to content, methods of instruction and evaluation.	February 1, 1982	Director	Model Program
3.2 Provide a rationale for the suggested approach discussing the various alternative models available and their particular shortcomings.	April 15, 1982	Program Development Specialist	Rationale and Summary
3.3 Provide suggestions for use of the model at various levels and different kinds of vocational programs.	April 30, 1982	Program Development Specialist	Implementation Strategies

Management Information System

Objective #4: To produce a technical report describing project activities and providing recommendations to state staff for the development of a statewide plan for incorporating basic skills training in vocational education programs in Illinois.

Activities	Date of Completion	Staff Responsible	Product/Outcome
4.1 Summarize project activities and milestone events in a chronological review of project history; highlight changes needed in original plans and adjustments made.	April 30, 1982	All staff	Project History
4.2 List recommendations for next steps and discuss sources of information for determining these recommended actions.	May 15, 1982	Director	List of Recommendations
4.3 Submit report	May 30, 1982	Director	Final Report

5.3 Procedures

Accompanying the objectives is a Management Information System which specifies the activities and persons responsible for them. The following will summarize generally the procedures utilized to complete this project.

An updated literature review will be produced utilizing where necessary computer searches, library research and personal contact with persons in the process of conducting projects or with special knowledge of current basic skills activities in vocational education. These procedures will be primarily carried out by the Director and Assistant Director and will take place during the first few months of the project.

Telephone and written survey methods will be used when and where appropriate in order to gather data that are still needed. The questions that will be asked whether orally or in person will be formulated based upon the most up to date information that is now available. There will be considerable effort made to assure consistency across questions that are asked, and in all cases, the information that will be sought will be previewed with state staff before it is gathered.

These data will be varied and somewhat subjective in nature since they will be largely experiencially based and comprised of opinions of persons involved in basic skills training and vocational education. For this reason, careful documentation will be kept of experts' views, anonymity will be carefully protected where desired, and draft documents submitted to state staff for review prior to final form.

The model program to be formulated will demand that a wide variety of data be analyzed, some of which will represent best practices and

other which will suggest practices that are needed, but were not evidenced in existing programs (i.e., follow up evaluation of program graduates).

The final report will include recommendations for planning and implementation of a one and five year effort that will encourage vocational programs to move towards the model of best practices that will be presented. Again the model will be a combination of practices that have worked and ones that seem to be crucial and feasible given the current "training" status. The model will be flexible and presented with suggestions for how to adapt it to a variety of program needs. Essentially, the final report will be intended to present information for the next step in the whole process of incorporation of basic skills training in vocational education, that of plan development.

Finally, it should be pointed out that as an underlying rationale, Ron McCage's 5 phase model (as adapted from the Roosevelt University, Sex Equity Project, 1978) is being employed. The model as revised for the proposed project is included on the following page. According to the model, the proposed project will be most involved in Phase 2. The applicability of the final three phases will depend to a large degree upon the experiences and findings of the coming year. Towards the conclusion of the proposed project, the applicability of the five phase model will again be brought into question for possible adaptation to existing needs.

5 Phase Rationale

Input — Feed Through — Output

Feedback

PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
Priority Development Phase (11/80 - /81)	Research and Planning Phase (8/81 - 4/82)	Development and Testing Phase (82 - 83)	Full Field Testing Phase (83 - 85)	Dissemination and Implementation (85-86)
- Review of Lit. and current research on existence, problems, & solutions to basic skills in vocational education. - Hold conference with teacher trainers and expert practitioners to gather data useful to adress basic skills attainment in vocational education.	- Identification of resources and target populations for training in certain areas. - Identify and study existing model programs to determine criteria for success in basic skills. - Conduct feasibility studies for proposed and existing programs. - Conduct surveys to assess needs concerning basic skills with institutions and assoc. in Illinois involved in vocat. educ.	- Conduct basic skills inservice workshops in defining tasks and implementing change; in developing innovative models and defining crucial concepts; in designing and conducting Intern Programs. - Collaborate with admin. and univ. to implement change in preservice programs towards achieving basic skills education. - Develop resource personnel catalogue for consulting and training - Devel. curricular and instructional materials for training. - Evaluate Pilot training programs and self correct.	- Implement tested models for training - Comprehensively evaluate and document programs, and identify for dissemination the most successful designs. - Collect consumer data on participants to determine degree basic skills has been eliminated: Impact study.	- Formative and Summative evaluation of operating programs. - Inservice workshops to disseminate package training programs. - Identification and use of Demonstration sites. - Dissemination and Demonstration Conference. - Establishment of Dissemination Network. - Production of dissemination materials.

Evaluation and Accountability

Products: Analyzed data.	Product: Technical report.	Products: Curricular & Instructional Materials	Product: Case studies of successful programs,	Products: Slide tape presentations, Final

Resource Persons

Dr. Henrietta Schwartz
Dean, College of Education
Roosevelt University

Dean Henrietta Schwartz was beneficial in providing names and contacting persons in the field of basic skills in vocational education. In addition, Dean Schwartz read and critiqued written materials and researched and wrote a portion of the literature review.

Dr. Gayle Mindes
Research Associate
Research and Development Center
Roosevelt University
College of Education

Dr. Gayle Mindes critiqued written documents, contributed services to the literature review, assisted in planning and implementing the one day seminar and in general provided assistance to the project in whatever aspect was needed.

Seminar Consultants

See list of Seminar participants, p. 15.

The consultants responded to a series of questions that formed a significant portion of the data generated for this project. In addition, they were available for refinement of the focus and direction of the basic skills in vocational education dilemma.

Summations of Evaluation Data Collected

Since this was not strictly a program of evaluation, the data that were gathered have been summarized in other sections. The kinds of data collected were information from current literature, seminar data, and data from site visits and interviews with local school personnel. Most information of this nature has been included in the narrative portion of the continuation proposal included under Major Activities and Events.

Statement of Impact

The population to be affected by the "Comprehensive Study of the Relationship Between Academic Requirements in Vocational Education and the Abilities of Students in Various Vocational Education Programs," include the following: DAVTE Staff, Regional Vocational Centers, Local schools, and other states. A better understanding of what has been shown to be a rather complex problem (i.e. the place of basic skills in vocational education) is expected after this study has been disseminated. Methods and strategies for intervention have been carefully identified, outlined and explained. (For a more detailed explanation of these intervention strategies, please see "A Determination of Best Practices for Incorporating Basic Skills Training in Vocational Education Programs in Illinois.")

Dissemination of the Study

Twenty copies of the Final Technical Report will be delivered to DAVTE.

Conclusion and Recommendations

This project was charged with the task of completing an extensive review of the literature, content analyzing vocational education curricula and formulating a list of policy recommendations for DAVTE consideration. The major event of this project was a conference held at Roosevelt University May 14, 1981, titled "Basic Skills in Vocational Education." The recommendations that follow were generated from this Conference. These recommendations fall into three categories: 1) The Relationship Between Student Abilities and Vocational Education Programs; 2) Resource Allocation and Priorities; and 3) Methods of Intervention.

1) What is the Relationship Between Student Abilities and Vocational Education Programs?

Although there was general agreement that all students in the vocational education programs don't need the same level of basic skills attainment to complete the program successfully, there are no data available that attempt to match vocational programs with a minimum/maximum basic skills level. Policy planners should:

- Determine the level of basic skills attainment that is required for success in each program area in vocational education.
- Individualize instruction for vocational education students to provide an opportunity for each student to reach his or her potential.
- Develop a system of competency based instruction for students in vocational education.

2) In what way should scarce resources be allocated? How should the decision be made to equip vocational education teachers to teach basic skills?

One of the criticisms of the vocational education pre-service teacher curriculum was its lack of formal instruction in the teaching of basic skills. Policy planners and educators should:

- Determine the part vocational education teachers will play in basic skills instruction.

- Determine where limited resources should be directed

    1. In-Service Education
    2. Pre-Service Education

3) What intervention strategy of basic skills instruction is most appropriate?

There are three primary methods that are considered valuable intervention strategies. But, there has been no systematic or rigorous evaluation of these strategies in Illinois.

Policy planners and educators should:

- Determine which approach (i.e. infusion, separation or collaboration) will best fit the needs of vocational education.
- Determine what is meant by basic skills.

    1. functional skills
    2. coping skills
    3. employability skills

- Develop a model program in one school or district that incorporates the various aspects of the three intervention strategies.

Other Activities and Materials Developed

Midway through the project, efforts were being mounted to plan a long term approach to dealing with basic skills. Part of this effort involved the development of an interview and survey instrument for local schools. Due primarily to the paucity of common guidelines for vocational programs for treatment of basic skills and the wide variety of approaches used by local projects, project efforts were refocused upon re-thinking original plans to survey local projects. These changes and subsequent plan have been discussed earlier. What is included here is the correspondence previewing some areas of need for the long range plan as well as the draft interview and survey instrument that were developed. It is quite possible that these instruments with some modifications will be useful in future efforts.

Roosevelt University
430 South Michigan Avenue
Chicago, Illinois 60605

College of Education

January 14, 1980

Dr. James Haire
Project Officer, Basic Skills Project
Dept. of Adult, Vocational and Technical Education
100 North First Street
Springfield, Illinois 62722

Dear Jim:

I enjoyed our meeting last Tuesday (January 6), during my trip to Springfield. I found our discussion to be very helpful and informative. I will not hesitate to contact you should the need arise.

However, as I indicated during our meeting last Tuesday, we feel that even at this relatively early stage of our investigation, we have discovered certain areas which would seem relevant to the study but that cannot be examined during the funding period for this project.

Although the project now in progress when completed will "stand on its own," we feel the investigation of the other areas to be detailed below will add to the information in this field and will impact on the relationship between basic skills attainment and vocational education.

We have identified at least five possible areas that we feel would add significantly to the investigation now in progress. Some were outlined in the original proposal while others have emerged after some preliminary investigation of the problem. We feel these additional areas are important and provide a basis for study and work in a second year continuation of this project.

1. Employers: The project as it is now designed will examine the relationship between basic skills and vocational education for students in schools. However, the life of a student does not end at graduation and therefore the scope of the study should not end there either. We feel that by extending the study to the workplace, valuable insights into the relationship between vocational education and basic skills attainment as seen through the eyes of employers would be produced.

2. Teachers/Administrators: The input of teachers and administrators in this areas cannot be stressed enough. Through the use of interview and questionnaire we would include their views on this relationship between basic skills attainment and vocational education.

3. Students: We feel that student views, perceptions, etc., regarding basic skills and vocational education should be sought.

   Questions that we would use to attain their views would be:

   1) How useful is the training you received in basic skills both in aiding your current studies-vocational education and in improving your job prospects both now and in the future?

   2) What changes would you recommend to improve the effectiveness of basic skills training in vocational education?

4. Instruments: Although the questionnaire and interview schedule will be field-tested and analyzed, the data will only be collected in the metropolitan Chicago area. We feel strongly that both instruments should be administered in a sample representing all geographic areas of the state. The value of this is obvious.

5. Early Detection: In programs with basic skills components in place, we would determine the mechanism if any that is used to identify the need for remediation and instruction in the basic skills areas. Recommendations could emerge for improving the methods of early detection.

In a recent telephone conversation with Dr. Donna Mertens of the National Center for Research in Vocational Education, who has just completed an exhaustive literature review of the research that exists on the effects of vocational education, Dr. Mertens decried the paucity of available research in the area of basic skills attainment in vocational education. The areas that we have indicated above we feel will contribute significantly to the amount of information now available in this field.

Sincerely,

Albert Bennett

Albert Bennett
Research Associate

AB/mf

Roosevelt University
430 South Michigan Avenue
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College of Education

January 14, 1980

Dr. James Haire
Project Officer, Basic Skills Project
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100 North First Street
Springfield, Illinois 62722

Dear Dr. Haire,

I have spoken at some length with Al Bennet concerning his recent Springfield visit with you and subsequent plans for the Basic Skills Project. I regret not being able to attend the meeting, and do hope to meet with you on subsequent visits. Al has prepared some suggestions for a continuation of the project (enclosed) which I feel are consistent with the original project and are areas needing investigation and study. If more detail is needed concerning these suggestions or if there are any questions or problems that need discussion, please do not hesitate to call for clarification and/or information. Thank you very much.

Sincerely yours,

George E. Olson

George E. Olson
Director
Research and Development Center
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GEO/mf
Enclosure

Draft: Interview Schedule

Basic Skills in Vocational Education

Mastery of basic skills in reading, writing, and mathematics is necessary for adequate functioning in all occupations as well as many other activities in our complex, technological society. To determine the relative importance of such mastery among the various occupations commonly offered in Illinois secondary schools, your thoughtful answers to the following questions are requested.

1. Extent of Need

1.1 Do students who successfully complete your occupational program have a reasonable chance of securing employment? How are their chances affected if their skills are two or more years below grade level?

1.2 What basic skill grade level is minimally necessary for satisfactory completion of your occupational program?

1.3 What percentage of students have you had in your program during the past three years with a grade level in basic skills lower than is minimally necessary?

1.4 What percentage of your students have been unable to complete your occupational program due to inadequate basic skills mastery during the past three years?

1.5 Please estimate the percentage of graduates from your program over the last three years who have had difficulty securing employment in the job for which they were trained because of basic skills deficiency?

1.6 What percentage of graduates from your program over the last three years have had difficulty mastering common life situations involving economic, civic, and social problems due to basic skills deficiencies?

2. Present Practices in Your Agency (School)

2.1 Are nearly all students who are deficient in basic skills identified at time of entrance into your program? If not, what percentage in your opinion?

2.2 Are you informed concerning the extent of basic skills deficiencies in students you teach?

2.3 Is adequate remediation available to them?

2.4 Are you responsible for providing remediation? If so, do you receive assistance in planning for remediation of basic skills deficiencies?

2.5 Does any remediation of basic skills deficiencies take place in the regular academic classes? In vocational education classes?

2.6 Is remediation of basic skills deficiencies shared between regular classes and special student services (reading, math specialists)?

2.7 Is remediation for basic skills deficiencies primarily the responsibility of

(circle one) specialists

academic teachers

vocational teachers

2.8 Do you feel that adequate assistance in planning remediation strategies is provided for teachers through present in-service professional development efforts?

2.9 Please rank the following professionals in terms of degree of need for in-service development of basic skills remediation techniques. (Greatest=4, least=1)

academic teachers _____

vocational teachers _____

guidance & counseling staff _____

specialists _____

Draft of questionnaire to be used to obtain current information concerning basic skills in vocational education.

Part I. Using the scale below please rate the following list of statements that address basic skills and vocational education.

1	2	3	4	5
strongly disagree				strongly agree

_____ 1. Basic skill training received in the academic program is needed for success in the occupational program in which I teach.

_____ 2. The ways that students with basic skills deficiencies are identified is adequate.

_____ 3. When a diagnosis of a student with basic skills deficiencies is made, ways to correct this deficiency are also provided.

_____ 4. It would be helpful if in-service programs that addressed how to teach students with basic skills deficiencies were provided.

_____ 5. Additional course work should be required for those teachers without training in the instruction of basic skills.

_____ 6. I am qualified to teach those students who need basic skills remediation.

_____ 7. Pre-service instruction in the area of teaching basic skills should be a graduation requirement.

_____ 8. Occupational program teachers should have the primary responsibility for the <u>remediation</u> of basic skill deficiencies.

_____ 9. Academic program teachers should have the primary responsibility for the <u>remediation</u> of basic skills deficiencies.

_____10. Reading and math specialists should have the primary responsibility for the <u>remediation</u> of basic skills deficiencies.

_____11. Occupational program teachers should have the primary responsibility for <u>teaching</u> basic skills.

_____12. Academic program teachers should have the primary responsibility for <u>teaching</u> basic skills.

_____13. Reading and math specialists should have the primary responsibility for <u>teaching</u> basic skills.

_____14. There is frequent interaction between the occupational and academic programs regarding basic skills training.

_____15. There is a strong need for revision of present practices for teaching basic skills.

_____16. Please feel free to add any other comments you feel are valuable.